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UNIT COST ANALYSIS OF THE EDUCATIONAL
EXPENDITURES OF LAC LA BICHE SCHOOL

The unit DIVISION NO. 51: 1969-1970

by



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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

FALL, 1971

UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and
recommend to the Faculty of Graduate Studies for acceptance,
a thesis entitled "Unit Cost Analysis of the Educational
Expenditures of Lac La Pêche School Division No. 51: 1959-
1970" submitted by George Albert William Purkess in partial
fulfillment of the requirements for the degree of Master of
Education

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ABSTRACT

The purpose of this study was to conduct a unit cost analysis of Lac La Biche School Division No. 51 for the 1969-1970 school year. Establishment of operational terms and a uniform system of classifying expenditures permitted data to be obtained by faculty workload surveys, examination of accounts, ledgers, and invoices, and by personal contact. To permit classification of costs, and the compilation of expenditures for the remainder of the school term which was incomplete at the time of data collection, all costs were subjected to proration and projection.

Resolving the sub-problems posed by the study was the assembly of data illustrating total and per pupil expenditures for the Division and for each school within the Division. Expenditures were allocated also in terms of direct, indirect, and implementary costs to yield unit costs in respect to courses, curriculum clusters, grades, and divisional levels for each of the eight schools and for the Division.

The findings revealed that the highest Divisional expenditure (52.7%) was devoted to teacher salaries while transportation costs consumed the next largest amount (16.0%). Similar expenditures of total costs were noted for each of the eight schools in the Division. Generally, direct pupil costs increased when enrolments decreased, instructional time increased, teacher salaries increased, and when grade levels

increased. For these reasons primarily, direct costs were higher for Reading/Phonics in Divisions I and II, Language and Mathematics in Division III, and Science, Mathematics, and Language Arts in Division IV. Least expensive were Supervised Study, Special Supervision, and Fine Arts for all four divisional levels. An examination of indirect and implementary costs revealed that indirect costs fluctuated in respect to the priorities attached to specific courses within the different schools and levels, while implementary costs tended to increase with the provision of additional services and personnel associated with increased grade levels.

As a result of the findings and conclusions, the study concluded with suggestions for further studies to be conducted to: (1) apply the data obtained, (2) examine costs on a longitudinal basis, (3) relate to other jurisdictions, (4) facilitate future collection and analysis of data, (5) determine economical means of offering courses, (6) examine the efficiency of centralization using pupil costs as a basis, and (7) ascertain the benefits derived from expenditures.

ACKNOWLEDGEMENT

This study was completed with the assistance and support of the Department of Educational Administration of the University of Alberta, the Department of Education of the Province of Alberta, and the Edmonton Public School Board.

The writer is also appreciative of the time and assistance devoted to this study by his advisor, Dr. R. C. Bryce, and to the assistance of Dr. P. J. Atherton and Dr. T. E. Kieren in the completion of this study.

A deep sense of gratitude is extended to the Central Office personnel, particularly to Mr. S. J. Clarke and Mrs. A. Clarke, and to the principals and teachers of the Lac La Biche School Division for their assistance and support of this study.

Finally, the writer wishes to express his personal thanks to his parents, Mr. and Mrs. G. G. Purkess, for their continuous encouragement in this and many previous years of education.

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CHAPTER I

PROBLEM, LIMITATIONS, ASSUMPTIONS, DESCRIPTION AND SIGNIFICANCE OF THE STUDY

INTRODUCTION

In this chapter the problem and sub-problems are stated as are the delimitations, limitations and assumptions of the thesis. A description of unit cost analysis is followed by a review of the significance of analyses of this type. The chapter concludes with an overview of the importance of the study.

STATEMENT OF THE PROBLEM

Main Problem

The major problem of this study was to conduct a unit cost analysis into the financial operations of Lac La Biche School Division No. 51 in the Province of Alberta for the school year September 1, 1969 to August 31, 1970 inclusive.

Sub-Problems

In the Lac La Biche School Division No. 51 for the September, 1969 through August, 1970 school year, the sub-problems investigated by this study concerned the educational costs per enrolled pupil:

- (1) In the Lac La Biche School Division
- (2) In each of the schools
- (3) In each grade division
- (4) In each grade division per school.
- (5) By subjects in each of the schools.
- (6) Of various program routes in each of the schools.

The specific program routes considered were the grades and subjects for the four grade divisions.

DELIMITATIONS AND LIMITATIONS OF THE STUDY

Delimitation

The study was delimited to the operational expenditures made in:

- (1) The Lac La Biche School Division No. 51,
- (2) The school year 1969-1970.

Limitations

The study was limited by the following:

(1) Operational expenditures were defined to exclude debt charges, interest, depreciation, and capital outlay.

(2) Only regular day students were included. The study has not taken into account the handicapped and adult classes, community services, or any activities unrelated to regular day students.

(3) Most of the proration statistics, especially for personal services rendered, were based upon estimates from primary sources (the person rendering a service).

(4) Projection of expenditures was based upon the

expenditures of the previous year, from primary sources, or, more frequently, a combination of the two aforementioned methods.

ASSUMPTIONS

For the purposes of this study, the following assumptions were made:

(1) The records, from which the cost data and related information were taken, were complete and accurate. The data and related information should be construed as accurate and appropriate to the year and jurisdiction in which the study was completed.

(2) Any expenditure category resulting in a per pupil cost of less than twenty-five cents was insignificant for the purpose of determining per pupil costs.

(3) Higher or lower per pupil costs in one school did not necessarily imply that the quality of education was superior or inferior in that school or when compared to other schools.

(4) Various estimated functional-character object unit costs of education per enrolled pupil were comparable among the schools included in the study.

(5) The methods and bases chosen for prorating and projecting expenditures were equitable, adequate, and realistic.

UNIT COST ANALYSIS

Description

This study has utilized the following definition of unit cost accounting, or unit cost analysis, provided by Fowlkes and Hansen (1952:471):

Cost analysis is the process of studying the total costs of public education for a given community, state, or area for a given year; trends in total school costs; the costs of specific services or subjects, e.g. transportation or English; the cost of education by grades or levels, e.g. elementary school costs, secondary school costs; cost of non-attendance; costs and tax-paying ability; cost and size of school; reasons for increased costs and need for decrease in costs.

As indicated by the definition, cost analysis measures the amount of expenditure for programs, performance, activities, or outputs based on a standard measurable unit. A per pupil basis was used as the standard measurable unit throughout this study. In the light of existing conditions, objectives, and outputs of the school system, the resultant per unit costs were analyzed. Results, then, become bases for improvement of programs and administrative procedures.

Unit cost analysis, for the purpose of this study, refers to the detailed determination of educational expenditures for specific functions, activities, services, or performances; the conversion of these expenditures into unit costs on a pupil enrolment basis; and the examination and analysis of the resultant per pupil unit costs.

Significance

Unit cost analysis, according to Knezevich and

Fowlkes (1960:153) attempts to measure how much was accomplished at a given price. Thus, unit cost analysis must present and interpret cost data as an aid to management and administration in controlling current and future operations.

Optimizing returns for educational expenditures was of concern to Fowlkes and Hansen (1952:474):

Maximum educational opportunity within limits of financial ability and a reasonable guarantee of operating efficiency that obtains, as nearly as possible, maximum value per dollar spent for public education might well be adopted as a working charter for all those responsible for business management of public education. Such a charter can be maintained only if financial accounting systems for schools are such that cost analyses of the type suggested can be made.

Analysis offers advantages in:

(1) Understanding the costs of operating a given school facility, and anticipating the future costs of such facilities.

(2) Judging the efficiency and practicability of certain school activities through knowledge of the expenses involved in relation to the benefits obtained.

(3) Preparation of school budgets by administrators charged with the responsibility of maximizing returns from public monies.

(4) Estimating costs of operating various programs or services to assist in establishing priorities with a view to balancing needs and demands.

(5) Comparing costs for efficient and effective operation of personnel, schools, services, and functions.

(6) Obtaining meaningful expenditure data to assist

school personnel and the general public in understanding the financial operations of school systems.

SIGNIFICANCE OF THE STUDY

Public Interest

Increasing public interest, and possibly alarm, in the realm of educational expenditures has been evidenced by numerous accounts in the public media. Knezevich and Fowlkes (1960:152) offered an earlier statement to this effect:

Public school costs have continued to rise at a fairly rapid rate during the years following World War II. The interest of the public in educational costs has never been greater.

As local school boards continuously face the task of raising revenues to meet expanded expenditures for education, public and government concern also appears to increase. Knowledge of expenditures should be, therefore, of increasing value to those concerned with education--as such, this study will benefit many concerned parties by providing specific information in the area of educational costs.

Government Interest

This study represents a segment of a project undertaken by the Minister's Committee on School Finance conducted under the auspices of the Department of Education of the Province of Alberta. Created by an Order-in-Council, the Committee is charged with examining the broad field of program analysis and budgeting in typical jurisdictions in Alberta. While an outline schedule of the Committee's

activities is found in Appendix A, this study has concerned itself with three particular aspects: (1) identifying and defining programs currently in existence in typical jurisdictions, (2) identifying the financial, human, and material resources allocated to the achievement of these programs, and (3) establishing the costs of programs in various types of school organization and determining the optimum conditions for economical administration.

While the conduct of the project has been charged to Dr. P. J. Atherton of the Department of Educational Administration of the University of Alberta, this study represents the early stage of the overall project--a plan that would benefit administrators and the public in achieving greater depth of understanding and planning in the realm of educational expenditures. This study, then, is one of a group of similar studies attempting to provide an overall view of the educational costs in the Province of Alberta as an initial phase in the study by the Minister's Committee on School Finance.

Lac La Biche School Division: Selection and Interest

Selection of Lac La Biche School Division No. 51 was based upon a research project completed by M. E. Eurchuk (1969). School jurisdictions in Alberta were examined by employing six variables: (1) total school population, (2) equalized assessment per pupil, (3) supplementary requisitions per pupil, (4) total expenditure per pupil, (5) pupil-teacher ratio, and (6) population density. The

seventy-seven school districts, divisions, and counties were classified respectively, and the jurisdictions ranked from low to high on the basis of individual rankings on each of the first four variables, and from high to low for the remaining two variables. Individual rankings for the six variables were totalled and a final ranking was assigned to the jurisdictions within the three classifications.

Consideration of the school divisions necessitated ranking all of the divisions and dividing the classification into thirds approximating high, medium, and low groupings on the total variable scale. The choice of representative divisions was based on two factors: the need to choose a division representative of the groupings within the divisional classification, and to be located near Edmonton. Four divisions, approximating the means of the variables as grouped, were chosen by Eurchuk. Lac La Biche School Division No. 51 was included since it represented a division near the mean of those divisions in the variables scale ranked as "low," and offered the advantage of proximity to Edmonton for the purpose of data collection.

Unit cost analysis affords the Lac La Biche School Division an opportunity to examine their educational system from a detailed financial viewpoint. This study will assist personnel within the Division to establish priorities, allocate funds, and plan for future educational services.

In addition, this study will be used as a base for program budgeting that might be introduced in the future,

as well as for immediate examination and comparisons within the Division. Because the Lac La Biche Division differs in terms of input variables from those of the other school jurisdictions in the total project, it is anticipated that the data for this Division will afford contrasting aspects of educational expenditures between the other divisions, counties, and districts under current study--aspects that should assist in further clarifying educational costs in the Province as well as in the Lac La Biche School Division.

SUMMARY

Increased public, government, and professional concern for increasing educational expenditures spark interest in the costs of operating educational services. Unit cost analysis affords a method whereby all concerned parties may meaningfully examine such expenditures and plan for future usage and priorities.

Unit cost analysis is a method for determining costs of specific functions, activities, or services on a per unit basis. Reduction to a per pupil unit base permits analysis of expenditures and a resultant rigorous examination of a system's operations.

The main problem of this study was to conduct a unit cost analysis into the financial operations of Lac La Biche School Division No. 51 for the 1969-1970 school year. Sub-problems examined the enrolled pupil education costs in the Division and for each of the schools.

CHAPTER I REFERENCES

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CHAPTER II

RESEARCH DESIGN

INTRODUCTION

As noted in the previous chapter, this study was a segment of a larger project that eventually will assemble similar studies for comparison. Yet, this study had to account for unique qualities existing in the Lac La Biche jurisdiction. To perform both tasks was difficult, but success was achieved through adoption and adaptation of uniform terms, procedures, and data preparation. This chapter established the design of research undertaken, and has elaborated on all aspects of that research design. Based on the study of Myroon (1969), the research design permitted a uniformity in data preparation that proved of merit to this study.

METHODOLOGY

The need for a meaningful method of analyzing costs was pointed out by Burke (1967:121):

Unit costs require (1) a unit of measure which is unchanging (a properly weighted pupil, for example), (2) a uniform cost-accounting system, and (3) uniform standards or specifications for describing the good or service whose cost is to be compared.

To achieve uniformity and facilitate the study of educational costs in Alberta, three distinct stages were

established in a study of the County of Thorhild by Myroon (1969). These stages were adopted and applied to the study of the Lac La Biche School Division:

(1) Advance Preparation

- (a) development of uniform terminology,
- (b) establishment of an adequate system based upon a uniform performance classification of expenditures,
- (c) determination of the accounting bases: cash or accrual.

(2) Unit Costing (Procedural Methodology)

- (a) determination of the period of time for which the per pupil expenditure figure is to be computed,
- (b) determination of the appropriate pupil unit to be used,
- (c) determination of the areas to be included in a per unit expenditure figure,
- (d) determination of the proration basis, standard or statistic to be used in allocation of expenditures to schools and areas,
- (e) estimate chosen per pupil costs of specified areas.

(3) Findings and Analysis

- (a) extrapolation of the major findings,
- (b) analysis of findings and cost data to make comparisons, predict trends, and draw inferences.

ADVANCE PREPARATION

Development of Uniform Terminology

Uniform terminology and definitions were established in order to permit orderly examination of data and achieve

meaningful and comparable data, a point stressed by Knezevich and Fowlkes (1960:153). Based on terms of the U.S. Department of Health, Education, and Welfare (1959:102-109 and 1967:265-270), the following definitions have been utilized in this study:

Accounts. Accounts are descriptive headings under which are recorded financial transactions that are similar in terms of a given frame of reference, such as purpose, object, or source.

Administration. Administration refers to those services or activities indirectly related to instruction through facilitation of educational operations.

Capital outlay. Capital costs are expenditures resulting in the acquisition of fixed assets or additions to fixed assets, primarily those of land and buildings. Building and land costs (capital costs) were excluded from this study; however, "capital costs" such as equipment, improvement to grounds or buildings were included.

Coding. Coding is the system of numbering or designating accounts, entries, or vouchers in such a manner as to categorize information.

Costs and expenditures. Costs and expenditures were used interchangeably in this study to indicate that amount of money or money's worth incurred, whether paid or unpaid, for any item of property or service.

Cost analysis, unit cost analysis, and cost accounting. Cost analysis or unit cost analysis, refers to the detailed determination of designated educational expenditures for specific functions, activities, services or performances; the conversion of these expenditures into per pupil unit costs; and the examination and analysis of these unit costs. For the purposes of this study, both terms were used interchangeably. Cost accounting refers to a method of accounting for costs incurred to accomplish a purpose or activity.

Division. The term "Division" has been given two different meanings in this study. First, Division has been applied to indicate the nature of a school system, such as the Lac La Biche School Division, a term encompassing all of the schools, services, etc. of such a system. Second, the term has been employed to indicate the level of instructional programs within the system or schools within the system. The four divisional levels and their equivalent grade levels used in this study are found in Table 1.

TABLE 1

GRADE LEVEL CLASSIFICATION BY DIVISIONS

Division Levels	Grade Levels
Division I	Grades 1 to 3 inclusive
Division II	Grades 4 to 6 inclusive
Division III	Grades 7 to 9 inclusive
Division IV	Grades 10 to 12 inclusive

Expenses. Expenses are those costs incurred by employees for non-salary items.

Projection. Projection refers to the methods applied to data with a view to expanding incomplete data to cover a specified period of time. Since data were collected prior to completion of the school year in this study, some data necessitated projection for the school year under study.

Proration, or prorating. Prorating is the allocation of parts of an expenditure of two or more different accounts in proportion to the benefits which the expenditure provides.

Salary. Salary is the total amount regularly paid or stipulated to be paid to an individual, before deductions, for personal services rendered while on the payroll of the school activity.

Uniform Classification of Expenditures

Unit cost analysis attempts to determine output per standard measurable unit (Knezevich and Fowlkes, 1960:153). The need to establish uniformity in classifying expenditures, therefore, was paramount, for all results would be based on such classification.

The need for a degree of uniformity between this study and the total project of the Minister's Committee was maintained by use of Reason and White's classification (Reason and White, 1966: Chapter 3). Mort, Reusser, and Polley (1960:379-380) supported this choice; Myroon (1969)

made use of this classification in a cost analysis of Thorhild County. However, some modification was necessary to adjust for the particular aspects of Lac La Biche School Division No. 51. Table 2 illustrates the classification utilized by this study in analyzing the educational costs of the Lac La Biche School Division.

In Table 2, code numbers in multiples of one hundred (100, 200, 500, 600, 700, and 800) represent general series expenditures (Administration, Instruction, Pupil Transportation, Plant Operation, Plant Maintenance, and Fixed Charges respectively). Specific series expenditures are sub-categories of the general series and as such represent specific costs within the gross categorizations. Not all of the Reason and White (1966) classifications are used in this study due to the absence of such expenditures in the Lac La Biche School Division. Consequently, Attendance (300), Health Services (400), Food Services (900), and Community Services (1100) have been omitted. Student Body Activities (1000) and Outgoing Transfer Accounts (1400) were minor in nature and included under the present expenditure series, while Capital Outlay (1200) and Debt Service (1300) were excluded from this study.

The following definitions and inclusions for expenditure series were applied to this study:

100 Administration. Administration consisted of those activities which had as their purpose the general regulation, direction, and control of the affairs of the

TABLE 2
CLASSIFICATION FOR EXPENDITURES IN THE LAC LA
BICHE SCHOOL DIVISION*

SERIES CODING NUMBER	EXPENDITURE
100	ADMINISTRATION
100 a	Salaries
100 b	Expenses
200	INSTRUCTION
200 a	Direct Salaries
200 a (1)	Instruction
200 b	Indirect Salaries
200 b (1)	Administration
200 b (2)	Clerical Staff
200 b (3)	Counsellors
200 b (4)	Librarians and Aides
200 b (5)	Substitutes
200 b (6)	Interns
200 b (7)	Bursaries and Other
200 c	Expenses
200 c (1)	Textbooks
200 c (2)	Library
200 c (3)	Instructional Supplies
200 c (4)	Equipment
200 c (5)	Other
500	PUPIL TRANSPORTATION
500 a	Contract Buses
500 b	Division Buses
500 c	Allowances
600	PLANT OPERATION
600 a	Salaries
600 b	Utilities
600 c	Supplies
600 d	Central Office
600 e	Other
700	PLANT MAINTENANCE
700 a	Salaries and Expenses
700 b	Materials
800	FIXED CHARGES
800 a	Expenses

*Based on Reason and White (1966: Chapter 3) and adapted for use in Lac La Biche School Division No. 51.

Lac La Biche School Division. Hence, the costs of operating a central office were included in this category. Salaries (100 a) included those of the Secretary-Treasurer, Assistant Secretary-Treasurer, two secretaries, and Superintendent of Instruction. The Divisional Superintendent's salary was not included since annual salary costs were paid by the Province of Alberta. Expenses (100 b) included expenses for trustees and central office personnel, auditors, legal fees, election and meeting costs, membership dues, advertising costs, central office employee benefits, and office supplies.

200 Instruction. Instruction referred to those costs incurred for the teaching of students or improving the quality of instruction. All personnel directly involved with pupils, and materials for instructional use, were included under this category. Because of the complexity of this series, elaboration through creation of specific categories became necessary.

200 a Direct salaries. Direct salaries included all full-time teaching personnel, plus the portion of salary of part-time teaching personnel (principals, vice-principals, librarians, counsellors, etc.) applicable when such personnel were involved in teaching specific courses or programs within the Division. Series 200 a (1) was identical and was included for the sake of clarity.

200 b Indirect salaries. Indirect salaries included all full-time and prorated portions of salaries of school personnel who were indirectly concerned with instruction.

Seven sub-series categories comprised this classification.

Series 200 b (1) referred to prorated portions of salaries and allowances of principals and vice-principals when they were engaged in administrative functions (exclusive of teaching duties). Series 200 b (2) included salaries, expenses, and benefits paid to, or on behalf of, the clerical staff in the schools of the Division. Series 200 b (3) included the prorated portion (exclusive of teaching duties) of school counsellor's salaries. Series 200 b (4) included the prorated portions of full or part-time librarians salaries, and librarian aides when applicable. Series 200 b (5) included the costs of substitutes (certified teachers) and of supervisors (non-certified personnel) replacing classroom teachers during temporary absences. Series 200 b (6) were salaries paid to future teachers (interns) of the Division. Series 200 b (7) were bursaries paid to university students in consideration of future teaching services.

200 c Expenses. This classification included those expenses incurred for teaching activities or for direct or indirect improvement of instruction. Five sub-series categories comprised this classification.

Series 200 c (1) represented the gross cost of textbooks purchased by the Division. Series 200 c (2) included costs of purchasing, operating, equipping, and maintaining library services and materials exclusive of salaries and capital costs for construction or expansion. Series 200 c (3) included all paper supplies, non-library book orders, audio-

visual materials, and numerous other miscellaneous articles intended for classroom usage within the schools. Series 200 c (4) incorporated all equipment purchased by the Division for school usage. While Division records indicated such equipment as "Contributions to Capital and Loan Fund," examination revealed that such costs were incurred yearly, intended for instructional use, and were paid for out of operating revenues. Inclusion of such equipment (audio-visual equipment, business machines, etc.) was deemed a portion of instructional operating costs rather than capital outlay. Series 200 c (5) included miscellaneous expenses related to school operations and the instructional program. Included in this category were employee benefits for school personnel, correspondence courses, inservice and extra-curricular expenses, and miscellaneous school costs (i.e. instructional staff expenses).

500 Pupil transportation. The pupil transportation category included costs pertaining to the conveyance of pupils to and from schools, whether for curricular or extra-curricular activities, and for allowances in lieu of conveyance.

Series 500 a applied to contracted services. Costs incurred were for salaries, operation, and maintenance of transportation services on specified routes on an annual contracted basis. Series 500 b allocated costs incurred by Division-owned buses. Personnel salaries and benefits, maintenance costs, material and equipment expenses (exclusive of vehicle purchases), and miscellaneous costs attributed to

such services were included. Series 500 c represented expenditures for student housing and boarding allowances--monies paid in lieu of conveyance due to inaccessibility of residence.

600 Plant operation. This category included those expenses incurred for housekeeping activities concerned with keeping the physical plant open and ready for use. The term "plant" applied to all buildings operated and maintained by the Lac La Biche School Division. Five categories were used to indicate the varying nature of expenditures.

Series 600 a included salaries, contracts and benefits incurred by the Division in providing custodial services for schools. Series 600 b applied to provision of all utilities for schools (including heat, light, and water). Series 600 c incorporated all custodial supplies used in the schools. Series 600 d included custodial salary, benefits, supplies, and utilities used by the Division's Central Office and warehouse. Series 600 e included the cost of utilities provided for teacher residences owned or operated by the Division.

700 Plant maintenance. This category referred to the upkeep of the physical facilities through repair and replacement to keep property in good condition and at equal value. Series 700 a provided for the inclusion of salaries, benefits, expenses, and miscellaneous costs incurred by maintenance personnel. Series 700 b referred to the

expenditures incurred for materials. The infrequent nature of maintenance costs created a distinction between such costs and those of the more regularized operational costs.

800 Fixed charges. Fixed charges included rents, taxes, insurances, interest on operational loans, and appraisals incurred by the Division. Employee benefits were excluded from this category since their application was included in previous, and more specific, categories.

Determination of the Accounting Base

Two systems of accounting are commonly used to record expenditures. The cash system refers to the method of withholding entry into accounts until actual payment or receipt occurs.

Examination revealed that Lac La Biche utilized the cash system of accounting, a situation which posed a problem since this study needed knowledge of expenditures for a complete school year at the time of data collection. The dilemma was resolved by use of a modified cash system, whereby costs incurred from September 1, 1969 to the date of data collection would be utilized, and thereafter utilization of proposed expenditures. Proposed costs were facilitated by invoices for purchases and definite knowledge of future costs (i.e. salaries, etc.). Under this method, the total time period under study was completed.

UNIT COSTING

Determination of Time Period

Following the recommendation of Reason and White (1966) and the study of Myroon (1969), this study utilized an annual basis for computation of per pupil expenditures.

Divisions I, II, and III per pupil expenditures were calculated on the basis of weekly programs undertaken for the complete school year under study. Division IV per pupil expenditures were adjusted by using one-half of the time recorded for semestered courses. Consequently, semestered and non-semestered courses, were treated as full year courses similar to those of the other three divisional levels, yielding comparable annual costs for the year under study.

Determination of the Appropriate Pupil Unit

Johns and Morphet (1952:469) and Corbally (1962:107) indicated that the best per pupil unit measurements were Average Daily Enrolment or Average Daily Membership. To achieve these measurements, complete records of student attendance would be necessary. This study could not make use of such measurements since data were collected prior to completion of the school year. Therefore, the pupil unit was based upon the number of pupils registered on January 31, 1970. Discussion with school personnel indicated that this date would be reasonably accurate, reflecting an average number of students for the complete school year. This method was applied to Divisions I, II, and III. Division IV schools

were subjected to mid-year fluctuations in registrations due to semester changes. While courses were based upon the enrolment reports of Faculty Workload Surveys for both semesters, Division IV and the respective school totals were based on a totalling of both semesters and a subsequent halving of this total. Therefore the figures for Division IV totals became averages, except for specific courses.

Two pupil unit costs have been reported throughout this study. Per enrolled pupil costs have been applied to courses or programs based on the number of students taking a particular course or program. Per pupil costs, or actual per pupil costs, were included on the basis of the total number of students that could logically undertake such a course or program--a figure based on the total number of students in that grade, school, or level. The enrolled pupil costs reflected pupil costs on a unit basis for specific courses; per pupil costs permitted calculation of per pupil costs for a program or level.

Determination of the Areas of Per Unit Expenditures

In accord with the sub-problems of this study, a unit cost analysis has been performed for all expenditures of the Lac La Biche School Division under the areas of: (1) the school system, (2) each school in the system, (3) grade divisions within the system, (4) grade divisions within the schools, (5) by subjects, and (6) by program routes and subjects.

Determination of the Proration Bases

Of prime difficulty, as in many cost analyses, was the determination and application of preferable, equitable, and practical methods of prorating expenditures. Since proration involves the allocation of expenditures on the basis of proportional benefits, data could be misrepresentative if caution was not used in selecting appropriate proration methods. Knezevich and Fowlkes (1960:163-166) and Myroon (1969) advocated specific methods of proration which offered partial assistance for analyzing data in the Lac La Biche system. The lack of knowledge of actual expenditures or of proper data precluded usage of the quantity-consumed, mileage, and hour-consumption methods. The general methods utilized to prorate expenditures in this study have been listed below; specific application will be noted in Chapter III of this study.

Time method. In this method the allocation of an expenditure was based on a given activity in proration to the time spent in each activity. For example, a counsellor instructing grade seven mathematics for ten periods weekly, grade seven science for twenty periods weekly, and receiving ten periods for counselling activities would have a salary allocated as follows: 25 percent allocated to grade seven mathematics, 50 percent allocated to grade seven science (a total of 75 percent allocable to direct instruction), and 25 percent allocated to counselling (indirect salaries).

Time membership method. This method incorporated the use of time and membership attendance based on a specific activity. For example, a teacher instructing three grades in one classroom would have a salary allocated on the basis of one-third for each grade assuming that pupils were equally distributed in all three grades. Notwithstanding such situations, problems occurred where grade level membership differed. In such cases, where a different level of program was taught, the salary was distributed equitably, but then was subjected to the further division by disproportionate numbers. The assumption was that programs were equally valued, but that disproportionate numbers occupied differing shares of that teacher's time.

Number of pupils method. This method, commonly used when other methods were deemed inapplicable, allocated expenditures in proportion to the actual number of pupils. For example, a cost applicable to students in general of one school was divided by the number of pupils in attendance in that school.

Actual expenditure method. Actual expenditures were allocated to a given activity in total or in known proportion to an activity that was specifically chargeable for that activity and expenditure. For example, a school that might have purchased athletic equipment at a value of \$100.00 had that total sum allocated to the physical education program in that particular school.

Number of classroom method. By this method prorating was completed on the basis of the expenditures in relation to the number of registered rooms present in the school or grade. For example, \$1,000.00 worth of custodial supplies might be divided among grade levels in one school on the basis of the number of register rooms per grade in relation to the total number of register rooms.

Determination of Chosen Pupil Costs

Use of a uniform accounting system, projection of costs, and proration of all expenditures permitted the creation of per enrolled pupil and per pupil unit costs. Such costs were assembled in accord with the sub-problems of this study and have been presented in tabular and written forms in the remainder of this study.

FINDINGS AND ANALYSIS

At the outset of this study, it was obvious that expenditure levels, prorational methods, and enrolments would affect unit costs. Inclusion of data pertinent to such situations were sought and included when available. However, the nature of this study did not lend itself to specific statistical measurements, and therefore significant findings were based on observable facts, comparisons, and reasons for such situations. On the basis of the data assembled by this study, findings of a predictive, inferential, and general nature were made.

SUMMARY

Since this study is a segment of a larger project, a large degree of uniformity in terms, definitions, and procedures was necessary. Classification of unit costs were based on fairly rigid guidelines, broken only when local conditions in the Lac La Biche School Division warranted such alterations. Procedures established by Myroon (1969) assisted in preparing a research design applicable to the Alberta educational scene. However, the results of this study will be limited by many variables, with the prime factor being the idiosyncracies extant to the area under study.

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CHAPTER III

SOURCES, COLLECTION, AND TREATMENT OF DATA

INTRODUCTION

With the establishment of uniform terms, definitions, and methodologies, the next phase in this study (conduct of a cost analysis in the Lac La Biche School Division) was to obtain the needed data.

This chapter outlines the methods employed to secure meaningful data in relation to the study. Permission for conduct of the study, methods utilized in collecting data, projection and proration methods within the established expenditure classifications, and treatment of the assembled data comprise the basic sections of this chapter.

DATA ACQUISITION

Permission for the Study

Following the selection of Lac La Biche School Division No. 51 as the jurisdiction under study was the need to acquire permission from the Division itself. Initial contact with the Division was established by the researcher through correspondence with the Superintendent of Schools for Lac La Biche. A letter indicating the nature of the study and a letter of explanation from the Deputy Minister of Education were dispatched to the Lac La Biche School Division

on January 19, 1970. Copies of both letters may be found in Appendix A of this study. Permission and arrangements for the conduct of the study were completed via telephone conversation and through personal visitation by the researcher.

Data Sources and Collection

Facilitating data collection and assembly were forms prepared for such purposes (see Appendix B). Data were collected in two stages: information related to actual instruction was obtained in February of 1970; implementary and indirect costs were collected in the first week of May, 1970.

Instruction. Data pertinent to this aspect of the study included teaching duties, pupil enrolments, and related times. Information was gathered using the Faculty Workload Survey forms (Appendix B) supplied to schools in the Division. Explanations and instructions (in some cases by personal attendance of the researcher at staff meetings, principal visitations, or through brief correspondence) accompanied the Survey forms; however, further clarification was needed in specific instances. This was accomplished via telephone or personal conversations in the ensuing months.

Implementary and indirect costs. Assembly of implementary costs (those expenditures not directly or specifically allocable to a particular course or program) and indirect costs (those expenditures that could be applied specifically to a particular course or program) was delayed until a later

date to permit treatment of instructional data and to attain increased accuracy through accumulation of actual rather than projected costs. Implementary and indirect costs, assembled and categorized on applicable forms (Appendix B), were obtained from the Division's ledger accounts, invoices, and other financial records and statements. To ensure accuracy, the researcher worked in conjunction with the Assistant Secretary-Treasurer and Secretary-Treasurer of the Division.

PROJECTION AND PRORATION OF EXPENDITURES

Since data were collected prior to termination of the actual year of expenditures under study, accurate estimation of expenditures beyond the date of data collection was necessary. Actual costs were obtained for the September 1, 1969 to April 30, 1970 period; projected costs for the May 1, 1970 to August 31, 1970 period were added to the existing expenditures. Such projected costs were obtained in various manners, but all were based upon invoices, budgeted costs, or anticipated expenditures as determined through consultation with the Assistant Secretary-Treasurer or Secretary-Treasurer. As a consequence, this study assumed such costs were projected in a reliable manner to reflect accurate future costs.

All actual and projected expenditures were subjected to prorational methods (those methods that allocated expenditures in proportion to received benefits) to effect unit costs by location and function (i.e. to schools, grades, and/or subjects). Actual expenditures and some projected costs were

allocated to specific locations or functions as evidenced by the Division's records; those costs not specifically allocable were prorated on the basis of those methods indicated in Chapter II of this study. A summary of prorational methods utilized for the various expenditure classifications has been illustrated in Table 3.

Clarification of projection and proration methods applied to expenditures has been elaborated below.

100 Administration

Projection. Salaries of central office personnel were projected on the basis that such personnel would continue in their positions at an annual or monthly salaried rate until August 31, 1970. Expenses presented more difficulties since each item under this category had to be considered individually. Recurrent and non-recurrent (single yearly costs) expenditures were considered for the total time period under study and thus were accounted for with minimal difficulty. Unexpected expenditures, such as advertising costs, posed a problem. Projection of such costs was resolved through consultation with the Secretary-Treasurer or Assistant Secretary-Treasurer in order to obtain a meaningful estimation, and such estimation was considered as real expenditure for the period of time in question.

Proration. Since no accurate estimate of time devoted to specific levels or schools in the Division could be determined by central office personnel, proration of salaries was

TABLE 3

PRORATION METHODS UTILIZED IN ALLOCATING EXPENDITURES TO
SCHOOLS, GRADE LEVELS, AND SUBJECTS

Expenditure Series	Proration Method*		
	School	Grade Level	Subject
100 ADMINISTRATION			
a. Salaries	NP	NP	
b. Expenses	NP	NP	
200 INSTRUCTION			
a. Direct Salaries			
(1) instruction	AE & T	T	T
b. Indirect Salaries			
(1) administration	AE & T	T	
(2) clerical staff	AE	T	
(3) counsellors	AE	T	
(4) librarians, aides	AE	T	
(5) substitutes	AE & NP	NP	
(6) interns	AE & NP	NP	
(7) bursaries, other	NP	NP	
c. Expenses			
(1) textbooks	NP	NP	
(2) library	AE & NP	NP	
(3) inst. supplies	AE & NP	NP	AE**
(4) equipment	AE & NP	AE & NP	AE**
(5) other	AE & NP	NP	
500 PUPIL TRANSPORTATION			
a. Contract Buses	AE & NP	NP	
b. Division Buses	AE & NP	NP	
c. Allowances	AE	NP	
600 PLANT OPERATION			
a. Salaries	AE	NC	
b. Utilities	AE	NC	
c. Supplies	AE	NC	
d. Central Office	AE	NP	
e. Other	AE	NP	
700 PLANT MAINTENANCE			
a. Salaries & Expenses	AE	NP	
b. Materials	AE	NP	
800 FIXED CHARGES			
a. Expenses	AE & NP	NP	

* Legend: T: time

AE: actual expenditure

NP: number of pupils

NC: number of classrooms

** As applicable.

based on school size as determined by pupil enrolments and percentages of all salaries were accorded to schools on that basis. Expenses of central office administration was accorded similar treatment.

200 a. Direct Salaries (Instruction)

Projection. All expenditures under this category were based on the teachers' salary grid in effect for the period of the study. Initial delay was due to lack of settlement of a new contract between the Division and teachers; however, at the time of the May, 1970 data collection, all costs (including special allowances) were known in terms of actual costs and no projection was necessary.

Proration. All costs were prorated on the basis of information received from the Faculty Workload Surveys. Salaries were proportioned to schools receiving the services of particular teachers (or allocated on a time basis if two schools were involved), then prorated to specific courses, programs, and grades. Preparation time was prorated to all courses taught by a teacher on the basis of time spent in instruction of such courses. Teachers involved in other duties (administration, counselling, etc.) had portions of their salaries prorated between those activities and their teaching duties.

200 b. Indirect Salaries (Instruction)

Projection. Since salaries of administrative, clerical,

counselling, and library personnel were on a known annual or monthly basis, no projection of costs was needed (except on known personnel changes). Projection of substitute costs, in consultation with the Secretary-Treasurer, was estimated on previous actual expenditures as charged to specific schools. Intern and bursary costs were included in the Division's budget and were recorded as (anticipated) actual expenditures.

Proration. Proration of administrative, clerical, counselling, and library costs was based on information provided through completion of the Workload Surveys. All salaries were prorated on the basis of time spent on specific activities and termed "actual expenditure." Time devoted to varying grade levels or programs was indicated on the Workload Surveys and was used as the basis for prorating costs to particular levels. Actual and projected expenditures for substitutes and interns were allocated on the basis of past or future services in specific schools. Since information was not sufficient to warrant specific course costs, such salaries were prorated to grade levels on the basis of the optimum number of pupils that would receive benefit from such services. Since bursary costs could not be applied to specific locations, such expenditures were prorated to the Division as a whole and to schools on the basis of enrolments (number of pupils) in proportion to the total enrolment.

200 c. Expenses (Instruction)

Projection. Textbook, library, instructional supplies,

equipment, and miscellaneous costs represented this area of expenditure. Textbook costs (200 c[1]) and miscellaneous expenditures (200 c [5]), which included correspondence courses, employee benefits, and single yearly expenditures, were expenses received into accounts prior to data collection in May, 1970 and therefore needed no projection. Established costs, such as employee benefits, were projected on the known expenditures required for the remaining time period. Library, supplies, and equipment expenditures (200 c [1], 200 c [3], and 200 c[4]) were created from actual expenditures of the previous eight months and projected costs for the remaining four months. Projection was based on consultation with the Assistant Secretary-Treasurer and Secretary-Treasurer. From budgetary statements, requisitions, and invoices, a reliable, estimated cost for each category was assumed and added to the actual expenditures.

Proration. Proration of textbook expenditures was based on the number of pupils, for records of textbook allocations to specific schools or grade levels did not permit specific allocations. No special consideration was provided for differing levels, since weighting higher levels would, in all likelihood, be offset by higher enrolments at the lower levels. The four remaining categories of Expenses were prorated on the basis of actual recorded expenditures to schools, grades, and, in some cases, to specific courses or programs. When evidenced, expenditures for specific purposes were allocated to those particular purposes--such specific

course or program allocations created the indirect costs noted further in this study. While most expenditures permitted allocation to schools, those which did not, and those costs of a general school program, were prorated to the school as a whole on the basis of the number of pupils.

500 Pupil Transportation

Projection. Conveyance of pupils from home to school, from school to home, and allowances in lieu of transportation were established on the basis of actual expenditures for the previous eight months of contracted and Division-operated services. Projected expenditures were based on payment for anticipated services and costs for the remaining two months of pupil attendance.

Proration. Proration of contracted or Division-operated buses was based on examination of the operator's records of schools and pupils concerned. Many buses delivered students to several schools and portions of expenditures were allocated to schools on this basis. For example, if Bus A had delivered twenty pupils to School X, ten pupils to School Y, and ten pupils to School Z, then the total costs would have been prorated as: fifty percent to School X, twenty-five percent to School Y, and twenty-five percent to School Z. Adjustment was made for schools not in close proximity to each other yet served by the same bus. Allowances in lieu of transportation (paid by the Division) were charged to the schools attended by those pupils.

600 Plant Operation

Projection. All costs under plant operation were determinable and little projection was necessary. Salaries were projected on the assumption that contracted or personal services would be maintained at the wage agreements in force during the study period. Supplies had been obtained in bulk prior to the date of data collection and no further costs were anticipated. Utilities were projected on the actual expenditures experienced in the final four months of the 1969 school year since no new rates prevailed.

Proration. All costs were allocated to specific schools in accord with the Division ledger accounts. Actual expenditures and projected costs were done in this manner. To allocate costs to grade levels, methods to augment the actual expenditures were imposed. To approximate a floor-area proration, salaries, utilities, and supplies (after school allocation) were prorated on the basis of the number of classrooms utilized by particular grade levels. Operational costs of central office were prorated to the whole Division on the basis of the number of pupils in respective schools and grade levels. Series 600 e (Other) included costs of operating the teacher residences. Incurred costs were charged to the schools in which those teachers instructed and the costs further allocated to grade levels on the basis of the number of pupils in those schools.

700 Plant Maintenance

Projection. Salaries were calculated on the basis of wage agreements in force until the end of the school year under study. Expenses for maintenance personnel were established by averaging previous monthly expenditures and projecting such costs until August 31, 1970 in consultation with the Assistant Secretary-Treasurer. Projection of materials was based on budgeted statements and expected costs for the remaining portion of the school year.

Proration. Actual expenditures and projected expenditures were allocated to schools as actual expenditures in respect to services and benefits derived. Proration within the schools, in absence of further particulars, was allocated by the number of pupils in attendance.

800 Fixed Charges

Projection. Recurring expenditures were projected by multiplying the constant monthly costs (such as rent) times the number of months remaining. Insurance, and similar costs that occurred once a year, needed no projection since expenditures had been made. Taxes were projected by using one-third of the 1969 expenditure added to two-thirds of the budgeted 1970 figure. Other miscellaneous fixed charges, including rentals for use of special facilities, were projected on the basis of expenditures for the respective 1969 period.

Proration. While some costs were directly

attributable to specific schools, others were not and consequently were prorated on the basis of the number of pupils in attendance in schools. The prorated sums allocated to each school were prorated to grade levels on the basis of the number of pupils in each grade.

TREATMENT OF DATA

After the collection, projection, and proration of data was completed, and a brief examination by the Assistant Secretary-Treasurer and Secretary-Treasurer had been completed, the data were prepared for computer analysis. Data were coded on sheets, verified, punched on cards, and verified once more.

COSTAN Ø1, a computer program developed for the project by Hawley and Prokop of the Department of Educational Administration, was used to obtain total costs and enrolled pupil costs for various program levels and schools based on expenditure series 200 a. (Direct Salaries). Despite some difficulties, the program calculated the costs which are presented in the subsequent chapter. All implementary and indirect costs (including series 100, 200 b, 200 c, 500, 600, 700, and 800) were calculated by a separate computer program and, in most cases, manually.

SUMMARY

With permission granted for conducting this study, data were collected using survey forms to obtain the extent of programs, courses, enrolments, and duties of school

instructional personnel. Implementary and indirect costs were obtained from accounts, invoices, statements, and consultation with the Lac La Biche Divisional office. Actual expenditures were recorded for the September 1, 1969 to April 30, 1970 period, whereupon various means of projecting costs from May 1, 1970 to August 31, 1970 were employed.

All total costs, actual plus projected expenditures, were subjected to several prorational methods that permitted expenditures to be allocated to differing locations, levels and functions within the expenditure classifications of the Division's activities. Finally, the assembled data were accorded computer and manual analysis to effect unit costs.

CHAPTER IV

EDUCATIONAL EXPENDITURES IN LAC LA BICHE SCHOOL

DIVISION NO. 51: 1969 - 1970

INTRODUCTION

The conduct of a unit cost analysis of the educational expenditures of Lac La Biche School Division No. 51 resulted in a voluminous amount of data. Data pertinent to sub-problems of this study were selected and included in this chapter in both tabular and verbal forms. An overview of the Lac La Biche School Division, total 1969-1970 expenditures of the Division, enrolled pupil costs by grades per school, enrolled and per pupil costs by grades and divisions in the Division, and opportunity pupil costs were included in this chapter. 'Implemen-tary and indirect costs were added to complement the costs of direct instruction.

OVERVIEW OF LAC LA BICHE SCHOOL DIVISION

No. 51: 1969 - 1970

Lac La Biche School Division No. 51 was composed of eight schools, a central office, warehouse, teacher residences, and four schools (Central, V. M. Welsh, Dr. Swift, and J. A. Williams) were located within the Town of Lac La Biche. The remaining schools and residences were located in the villages of Plamondon, Caslan, Wandering River, and Rich Lake.

A total of 2,239 pupils received instruction in the 1969-1970 school year from 111 teachers in the eight schools. School size varied from the eight-grade, three-teacher Rich Lake School of 62 pupils to the four-grade, twenty-six teacher V. M. Welsh School of 654 pupils. Full-time pupil attendance ranged from the 272 pupils of Grade One to the 87 pupils of Grade Twelve. Table 4 has presented the pupil enrollments and teaching personnel by schools, divisions, and grades and has formed the basis for allocating pupil costs in this study.

Because the costs of direct instruction were examined extensively by this study, Table 5 has been included to provide an indication of the teaching personnel in the Lac La Biche Division for the 1969-1970 year. Table 5 revealed that, in general, lower average salaries, training, and experience were found in the four schools located in the Town of Lac La Biche than in the schools in the other centers. For the Division as a whole, average salaries decreased (from \$8,091.41 to \$7,408.00) as grade levels increased, but years of training increased (2.4 years to 3.9 years) with increasing grade levels. Experience tended to decrease slightly with increased grade levels, partially accounting for decreasing salaries at the upper grade levels. Caution must be exercised in the use of such figures, however, since several of the outlying schools in the Division employed few teachers in comparison to the larger and more central schools of the Town of Lac La Biche.

TABLE 4

ENROLLMENTS ON JANUARY 31, 1970 BY GRADES, DIVISIONS, AND SCHOOLS FOR
LAC LA BICHE SCHOOL DIVISION NO. 51

School	Opp.	1	2	3	4	5	6	Grade Level				9	10	11	12	School Total	Teaching Staff
								7	8	9	10						
Central	-	211	176	-	-	-	-	-	-	-	-	-	-	-	-	387	17
V. M. Welsh	-	-	-	186	169	152	147	-	-	-	-	-	-	-	-	654	26*
Dr. Swift	33	-	-	-	-	-	-	136	123	117	-	-	-	-	-	409	20
J. A. Williams	-	-	-	-	-	-	-	-	-	-	98	78	74	-	-	250**	19†
Plamondon	13	24	26	27	21	20	22	23	21	26	21	19	13	-	-	276	15
Caslan	-	21	26	21	11	15	17	-	-	-	-	-	-	-	-	111	5
Wandering River	-	7	14	9	5	12	16	7	7	13	-	-	-	-	-	90	5
Rich Lake	-	9	5	13	8	6	8	7	6	-	-	-	-	-	-	62	3
Lac La Biche Division Total	46	272	247	256	214	205	210	173	157	156	119	97	87	-	-	2239	111
Totals by Division	Opp.	Division I		Division II		Division III		Division IV		All Pupils		Staff					
	46	775		629		486		303		2239		111					

* Excludes 3 teachers with partial teaching duties in V. M. Welsh School.

** Totals adjusted to indicate average number of students for both semesters.

† Includes 3 teachers with partial teaching duties in V. M. Welsh School.

TABLE 5

TEACHERS' AVERAGE SALARY, TRAINING, AND EXPERIENCE PER DIVISION
PER SCHOOL IN THE LAC LA BICHE SCHOOL DIVISION

	Division I			Division II			Division III			Division IV		
	Sal.	Trng.	Exp.	Sal.	Trng.	Exp.	Sal.	Trng.	Exp.	Sal.	Trng.	Exp.
Central	7572.35	2.2	12.06									
Welsh	8441.11	2.6	10.56	6852.91	2.4	11.63						
Swift							6873.72	3.1	6.39			
Williams										7077.05	3.9	9.35
Plamondon	7798.75	2.0	8.75	8120.00	2.6	10.00	8048.66	3.4	10.89	7716.00	3.8	10.88
Caslan	9505.00	2.7	19.33	8475.00	2.0	13.50						
Wander River	8531.00	2.8	11.00	8531.00	2.8	11.00	8531.00	2.8	11.00			
Rich Lake	8500.00	2.0	11.00	10160.00	4.0	6.00	8620.00	2.0	8.00			
Lac La Biche School Division	8091.41	2.4	11.77	7907.16	2.5	11.27	7498.18	3.1	8.36	7408.00	3.9	9.79

TOTAL EXPENDITURES OF THE LAC LA BICHE

SCHOOL DIVISION: 1969-1970

Divisional Costs

Examination of expenditures and projected costs for the 1969-1970 school year in the Lac La Biche School Division No. 51 revealed operating costs of \$1,617,872.32, an average of \$722.59 per pupil (refer to Table 6). In conjunction with the Secretary-Treasurer of the Division, the researcher believed that the total represented 87.19% of the total estimated costs for the school year when estimates of capital costs and debt services were considered. However, this study has eliminated such costs from consideration and has utilized the \$1,617,872.32 total as the base for all analyses and comparison, and it was this figure (in essence, operating expenditures) that was used for calculating percentages and pupil costs.

Of the total, \$1,108,487.47 or 68.51%, was attributed to expenditures for Instruction, by far exceeding the next largest expenditure classification, Pupil Transportation at \$258,840.54 or 16.00%. In descending order, the remaining general classification costs were: Plant Operation (\$108,755.02 or 6.73%), Administration of Central Office (\$60,329.52 or 3.73%), Plant Maintenance (\$52,453.43 or 3.24%), and Fixed Charges (\$29,006.34 or 1.79%).

When the 2,239 pupils in the Division were used as the base for pupil costs, the highest cost per pupil was, once more, Instruction at a cost of \$495.08 per pupil, followed by \$115.61

TABLE 6

ESTIMATED GENERAL AND SPECIFIC EXPENDITURE CLASSIFICATION COSTS
OF LAC LA BICHE SCHOOL DIVISION NO. 51: 1969-70

Expenditure Series	Estimated Total Expenditures (\$)	Expenditure in Per Cent	Estimated Cost Per Pupil (\$)
100 ADMINISTRATION	(60,329.52)*	(3.73)	(26.94)
a. Salaries	37,766.05	2.34	16.87
b. Expenses	22,563.47	1.39	10.07
200 INSTRUCTION	(1,108,487.47)	(68.51)	(495.08)
a. Direct Salaries	((852,921.02))**	((52.72))	((380.94))
(1) instruction	852,921.02	52.72	380.94
b. Indirect Salaries	((142,127.77))	((8.78))	((63.48))
(1) administration	70,951.47	4.39	31.69
(2) clerical staff	14,630.92	.90	6.53
(3) counsellors	9,432.00	.58	4.21
(4) librarians, aides	19,048.35	1.18	8.51
(5) substitutes	12,223.03	.75	5.46
(6) interns	4,692.00	.29	2.10
(7) bursaries, other	11,150.00	.69	4.98
c. Expenses	((113,438.68))	((7.01))	((50.66))
(1) textbooks	17,670.73	1.09	7.89
(2) library	16,696.40	1.03	7.46
(3) inst. supplies	33,952.04	2.10	15.16
(4) equipment	30,515.99	1.89	13.63
(5) other	14,604.52	.90	6.52
500 PUPIL TRANSPORTATION	(258,840.54)	(16.00)	(115.61)
a. Contract Buses	219,681.91	13.58	98.12
b. Division Buses	25,233.13	1.56	11.27
c. Allowances	13,925.50	.86	6.22
600 PLANT OPERATION	(108,755.02)	(6.73)	(48.57)
a. Salaries	47,381.73	2.93	21.16
b. Utilities	47,328.17	2.93	21.14
c. Supplies	7,129.10	.44	3.18
d. Central Office	3,648.21	.23	1.63
e. Other	3,267.81	.20	1.46
700 PLANT MAINTENANCE	(52,453.43)	(3.24)	(23.43)
a. Salaries & Expenses	29,707.64	1.84	13.27
b. Materials	22,745.79	1.40	10.16
800 FIXED CHARGES	(29,006.34)	(1.79)	(12.96)
a. Expenses	29,006.34	1.79	12.96
TOTAL†	1,617,872.32	100.00	722.59

* () denote total for a general expenditure series.

** () denote series' sub-totals where sub-categories are involved.

† Total represents 87.19% of all estimated expenditures for 1969-70.

per pupil attributed to Transportation. Similarly the categories ranged downwards in pupil costs until the least cost, Fixed Charges (\$12.96 per pupil), was attained.

Since Instruction represented the largest general expenditure classification, this classification was further sub-categorized into Direct Salaries, Indirect Salaries and Expenses. The largest expenditure of this classification was for Teachers' Salaries (Direct Salaries) which required \$852,921.02 or 52.7% of the total (an amount equal to \$380.94 per pupil). Indirect Salaries accounted for 8.78% or \$63.48 per pupil, while Expenses were 7.01% or \$50.66 per pupil.

School Costs

Specific school expenditures, and expenditures charged to the Division, were prorated by varying methods to each of the schools in the Lac La Biche School Division. The result yielded Table 7, a summary of total costs, percentages, and pupil costs per school by general and specific classifications.

100 Administration. The highest percentage cost for administration was 4.76% recorded by V. M. Welsh School; the lowest was J. A. William School at 2.68%. However, per pupil costs were strikingly similar, ranging from \$29.19 to \$26.23.

200 Instruction. The highest instructional cost was 72.89% for J. A. Williams School; the lowest cost was 47.78% for Rich Lake School. J. A. Williams School had the highest per pupil cost at \$788.60, while V. M. Welsh School had the lowest per pupil cost at \$393.54.

Direct Salary school percentage costs ranged from 56.60% for V. M. Welsh School to 41.38% for Rich Lake School, while per pupil costs varied from \$566.16 (J. A. Williams) to \$318.35 (V. M. Welsh).

School percentage costs for Indirect Salaries ranged from 12.00% for J. A. William School to 2.39% for both Caslan and Rich Lake Schools. Per pupil costs for this classification ranged from \$129.88 (J. A. Williams) to \$17.31 (Caslan). The high level of difference seems to be attributed to the increase of additional personnel at the Division IV level performing various pupil services.

School percentage costs for Instructional Expenses ranged from 11.45% for Dr. Swift School to 4.01% in Rich Lake School. Per pupil costs decreased from \$83.34 per pupil in Dr. Swift School to \$27.06 in V. M. Welsh School. The figures illustrated, however, should not be construed as permanent expenditures--Dr. Swift School was allotted extra funds to increase programs, whereas V. M. Welsh School had benefited from a previous building and equipment allocation.

500 Transportation. Transportation costs generally averaged about 15% of school costs, with the exception of Rich Lake School that accorded 29.18% of their costs to transporting students--a cost apparently attributable to its outlying position in the Division. The highest per pupil cost was that of Rich Lake School at \$310.30, the second highest was \$150.32 at Wandering River School, while the lowest cost was the centrally located Central School at \$87.95 per pupil.

600 Plant operation. Plant operation school percentage costs fluctuated from a high of 10.83% at Rich Lake School to a low of 5.72% in V. M. Welsh School. Rich Lake School had the highest per pupil cost (\$115.11) while V. M. Welsh School at \$32.18 per pupil was the lowest. Such costs seem inversely related to pupil enrollment.

700 Plant maintenance. Maintenance costs varied from 7.77% of school costs, or \$82.64 per pupil in Rich Lake School, to 1.37%, or \$7.72 per pupil in V. M. Welsh School. Contributing cost factors appear to be school size, age of the plant, and location.

800 Fixed charges. School percentage costs for fixed charges ranged from 2.22% to 1.46%, while costs varied from \$20.32 to \$9.62 per pupil. No specific factors seemed to affect the percentage or costs.

Total costs. Total costs were affected primarily by enrollments and grade levels. Larger school populations and higher grade levels escalated total costs. The highest total cost was \$367,866.01 for V. M. Welsh School (654 pupils); the lowest total cost was \$65,925.77 for Rich Lake School (62 pupils).

Estimated per pupil costs were affected downwards by increased pupil enrollments, and upwards by higher grade levels and remoteness of geographical location. The highest per pupil cost was \$1,081.92 in J. A. Williams School, the second highest was \$1,063.32 in Rich Lake School, and the

lowest was \$562.49 in V. M. Welsh School.

ENROLLED PUPIL COSTS BY COURSES AND GRADES IN THE
SCHOOLS OF LAC LA BICHE SCHOOL
DIVISION NO. 51

Enrolled pupil costs by courses were affect by three main factors: (1) the salary of a teacher, or teachers, involved, (2) the number of students enrolled in the course, and (3) the amound of time expended on the course.

Tables 8 to 19 inclusive have portrayed the enrolled pupil costs by courses for grades one to twelve in each of the schools in the Division. Costs based solely upon teachers' salaries have been situated beneath the heading entitled "Direct Cost per Enrolled Pupil" and reflect the prorated portion of the teachers' time divided by the students engaged in that course. A fourth column, "Direct and Indirect Cost per Enrolled Pupil," has added together the direct per enrolled pupil cost and the indirect costs (expenditures allocated to a specific course in the school) followed by division by the appropriate number of pupils. Such indirect costs, obtained from examination of accounts and invoices, have been detailed in Tables 40, 41, 42, and 43 of Appendix "C" of this study.

To provide a general view of costs attributed to a single student per grade in each school, average per pupil costs have been included at the bottom of Tables 8 to 19. All pupil costs were based on the number of pupils enrolled in that grade and school. The "Direct/Indirect per Pupil

Average Cost" was obtained by totalling the course costs (Direct and Indirect Cost Per Enrolled Pupil times the enrolled pupils) and then dividing the actual number of pupils in the grade (and school) into the obtained sum. Implementary Per Pupil Costs (costs not assigned to specific courses) were based upon Table 44 (see Appendix C), which was compiled from the raw data that created Table 45 (Appendix C). Addition of the Direct/Indirect Per Pupil Costs and the Implementary Per Pupil Costs yielded the Average Per Pupil Cost, a sum indicating the average expenditure on a single student of a particular grade in a school.

Grade One

Table 8 has illustrated the courses and costs offered in Grade One in the schools of Lac La Biche School Division No. 51. The most expensive course in Grade One was Reading/Phonics at \$159.99 per pupil (Wandering River), a reflection of the large amount of teacher time spent in conducting that course weekly (roughly 600 minutes). Similarly, the four other schools incurred high costs for that course. The least expensive courses were Art and Health at \$3.57 per pupil (Plamondon) reflecting the small amount of time spent on that course. Generally, Music, Art, and Health were the least expensive courses in Grade One.

Grade Two

Grade Two courses and costs have been detailed in Table 9. The most expensive course, illustrating the large

TABLE 8

ENROLLED PUPIL COSTS OF GRADE ONE STUDENTS IN THE SCHOOLS
OF THE LAC LA BICHE SCHOOL DIVISION

Course	Central				Plamondon				Caslan				Wandering River				Rich Lake			
	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil	Min.	Pupil Per Week	Dir. & Ind. Cost Per Enrol. Pupil		
Opening Exercises	290	189	8.02	20	24	3.57	3.57	3.57	19.22	21	19.22	12.81	30	7	24.57	17	9	10.39		
Supervised Study	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Home Room Period	25	25	4.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Special Supervision	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Remedial Instruction	425	211	11.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Language	425	211	11.26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Reading or Writing	545	211	14.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Reading or Phonics	5,030	211	129.08	505	24	92.40	92.40	92.40	137.04	21	137.04	137.04	225	7	159.99	175	9	109.56		
Library and/or story time	--	--	--	28	24	4.95	4.95	4.95	19.22	21	19.22	12.81	60	7	42.66	30	9	18.89		
Spelling	612	211	15.64	60	24	11.00	11.00	11.00	19.22	21	19.22	12.81	60	7	42.66	30	9	18.89		
Creative English	--	--	--	80	5	113.37	113.37	113.37	--	--	--	--	--	--	--	--	--	--		
French	--	--	--	342	19	78.85	78.85	78.85	--	--	--	--	--	--	--	--	--	--		
Mathematics	1,952	211	50.27	155	24	31.90	31.90	31.90	45.21	21	45.21	12.81	112	7	94.51	55	9	51.24		
Science	480	211	12.31	160	24	13.75	13.75	13.75	19.22	21	19.22	12.81	75	7	49.14	40	9	34.00		
Science Studies	517	211	13.32	75	24	13.75	13.75	13.75	19.22	21	19.22	12.81	60	7	49.14	40	9	34.00		
Health	455	211	11.47	20	24	3.57	3.57	3.57	15.31	21	15.31	12.81	27	7	24.48	10	9	5.67		
Guidance	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Music	465	211	11.47	--	--	--	--	--	7.47	21	7.47	12.81	22	7	14.93	25	9	15.11		
Art	555	211	14.33	20	24	3.57	3.57	3.57	15.31	21	15.31	12.81	22	7	20.40	20	9	12.28		
Physical Education	350	211	12.34	40	24	7.15	7.15	7.15	13.06	21	13.06	12.81	45	7	34.84	25	9	15.11		
Industrial Arts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Religious Instruction	1,530*	211	21.33	135	24	24.75	24.75	24.75	--	--	--	--	235**	7	21.31	--	--	--		
Direct/Indirect Per Pupil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
Average Cost†	211	--	327.03	24	24	298.53	--	298.53	354.13	21	354.13	--	7	7	570.81	--	9	310.76		
Implementary Per Pupil Cost†	211	--	250.62	24	24	354.48	--	354.48	317.92	21	317.92	--	7	7	435.35	--	9	593.50		
Average Per Pupil Cost†	211	--	577.65	24	24	653.01	--	653.01	672.05	21	672.05	--	7	7	1,006.16	--	9	904.26		

*Total time for Grades 1 and 2

**Total time for Grades 1 to 6 inclusive

†Based on the actual number of students in yearly attendance.

TABLE 9

ENROLLED PUPIL COSTS OF GRADE TWO STUDENTS IN THE SCHOOLS OF THE LAC LA BICHE SCHOOL DIVISION

Course	Central					Plamondon					Caslan					Wandering River					Rich Lake							
	Dir. Cost		Pupil Per Enrol.	Dir. & Ind. Cost Per Enrol.		Min.	Pupil Per Week Enrol.	Dir. Cost		Pupil Per Week Enrol.	Min.	Pupil Per Week Enrol.	Dir. Cost		Pupil Per Week Enrol.	Min.	Pupil Per Week Enrol.	Dir. Cost		Pupil Per Week Enrol.	Min.	Pupil Per Week Enrol.	Dir. Cost		Pupil Per Week Enrol.	Min.	Pupil Per Week Enrol.	
	Enr. Pupil	Enr. Pupil		Enr. Pupil	Enr. Pupil			Enr. Pupil	Enr. Pupil				Enr. Pupil	Enr. Pupil				Enr. Pupil	Enr. Pupil				Enr. Pupil	Enr. Pupil				Enr. Pupil
Opening Exercises	400	176	12.13	12.13	25	26	4.28	4.28	25	26	7.43	7.43	25	26	7.43	7.43	30	14	12.29	12.29	17	5	18.70	18.70	17	5	18.70	
Supervised Study	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Home Room Period	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Special Supervision	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Remedial Instruction	913	176	28.34	28.34	125	26	22.19	22.19	120	26	37.17	37.17	60	26	18.58	18.58	75	14	26.66	26.66	20	5	22.10	22.10	20	5	22.10	
Reading or Writing	260	176	9.88	9.88	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Practical and/or	3,520	176	107.30	107.30	400	26	71.10	71.10	455	26	140.78	140.78	455	26	140.78	140.78	225	14	79.99	79.99	175	5	197.20	197.20	175	5	197.20	
Reading and Phonics	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Library and/or storytime	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Spelling	613	176	18.71	18.71	150	26	26.73	26.73	100	26	30.66	30.66	100	26	30.66	30.66	60	14	21.33	21.33	30	5	34.00	34.00	30	5	34.00	
Creative English	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
French	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Mathematics	1,763	176	54.02	54.02	200	26	35.55	35.55	275	26	85.02	85.02	275	26	85.02	85.02	113	14	47.89	47.89	83	5	93.50	93.50	83	5	93.50	
Social Studies	540	176	16.18	16.18	30	26	8.82	8.82	80	26	24.62	24.62	80	26	24.62	24.62	38	14	15.96	15.96	55	5	61.20	61.20	55	5	61.20	
Science	986	176	20.77	20.77	80	26	14.17	14.17	135	26	41.82	41.82	135	26	41.82	41.82	60	14	24.57	24.57	40	5	44.20	44.20	40	5	44.20	
Health	300	176	12.55	12.55	20	26	3.47	3.47	90	26	27.88	27.88	90	26	27.88	27.88	28	14	12.92	12.92	10	5	10.20	10.20	10	5	10.20	
Guidance	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Music	420	176	12.79	12.79	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Art	430	176	13.22	13.22	20	26	3.47	3.47	60	26	18.58	18.58	60	26	18.58	18.58	23	14	8.00	8.00	25	5	27.20	27.20	25	5	27.20	
Physical Education	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Home Economics	250	176	10.56	10.56	30	26	5.35	5.35	60	26	18.58	18.58	60	26	18.58	18.58	45	14	17.42	17.42	25	5	22.10	22.10	25	5	22.10	
Industrial Art	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Religious Instruction	1,530*	176	21.33	21.33	150	26	26.73	26.73	---	---	---	---	---	---	---	---	235**	14	21.31	21.31	---	---	---	---	---	---	---	
Direct/Indirect Per Pupil	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Average Cost†	---	176	---	340.02	---	26	---	290.56	---	26	---	463.89	---	26	---	298.55	---	14	---	298.55	---	---	---	---	---	---	5	558.57
Implementary Per Pupil	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
Cost‡	---	176	---	259.45	---	26	---	346.88	---	26	---	302.79	---	26	---	373.31	---	14	---	373.31	---	---	---	---	---	---	5	665.70
Average Per Pupil Cost†	---	176	---	599.47	---	26	---	637.44	---	26	---	766.68	---	26	---	671.86	---	14	---	671.86	---	---	---	---	---	---	5	1224.27

* Includes time for Grades 1 and 2
 ** Total time for Grades 1 to 10 inclusive.
 † Based on the actual number of students in yearly attendance.

amount of time and small enrollment, was Reading/Phonics at \$197.20 per pupil in Rich Lake School. Similarly, this course was the most expensive in the other schools. Excluding the special situation of Creative English and French, in the Plamondon School, Mathematics ranked as the second most expensive course in Grade Two for all schools. Music, Art, and Health tended to be the least expensive (\$3.47 per pupil in the case of Health and Art in Plamondon) in most of the five schools offering these courses in Grade Two.

Grade Three

The courses and costs of Grade Three have been illustrated in Table 10. The most expensive course was Reading/Phonics at \$149.48 per pupil in Wandering River School; the same course also was the highest in the other four schools. Ranging from \$35.96 to \$73.51 per pupil, Mathematics ranked second most expensive for all schools. Least expensive was Special Supervision in V. M. Welsh School at \$1.73 per pupil (a program of athletic activities for the noon-hour), while Supervised Study, Health, Music, and Art were inexpensive courses also.

Division I

The extensive time devoted to Reading/Phonics in Grades One, Two, and Three was a prime factor in making it the most expensive course in all schools. For a similar reason the second most expensive course was Mathematics. Generally, the least expensive courses were Health, Art, and

TABLE 10
ENROLLED PUPIL COSTS OF GRADE THREE STUDENTS IN THE SCHOOLS
OF LAC LA BICHE SCHOOL DIVISION

Course	Verz Welch				Piamondon				Casian				Wandering River				Rich Lake			
	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Enr. Pupil
Opening Exercises	70	77	5.68	5.68	20	27	5.15	5.15	25	21	6.83	6.83	---	---	---	---	17	13	7.19	7.19
Supervised Study	15	25	3.68	3.68	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Home Room Period	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Special Supervision	225*	186	---	1.73	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Remedial Instruction	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Language	1,080	186	35.49	35.49	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Printing or Writing	900	186	12.61	12.61	30	27	7.92	7.92	60	21	17.07	17.07	---	---	---	---	---	---	---	---
Reading or Phonics	3,240	186	106.69	106.69	460	27	121.21	121.21	470	21	133.55	133.55	---	---	---	---	---	---	---	---
Library and/or Storytime	75	54	8.92	8.92	30	27	7.92	7.92	---	---	---	---	---	---	---	---	---	---	---	---
Spelling	655	186	21.31	21.31	90	27	23.77	23.77	---	---	---	---	---	---	---	---	---	---	---	---
Creative English	---	---	---	---	85	12	49.91	49.91	---	---	---	---	---	---	---	---	---	---	---	---
French	---	---	---	---	125	15	38.46	38.46	---	---	---	---	---	---	---	---	---	---	---	---
Mathematics	1,570	186	51.49	51.49	240	27	63.38	63.38	225	21	64.00	64.00	---	---	---	---	---	---	---	---
Social Studies	870	186	28.81	28.81	120	27	31.69	31.69	130	21	34.13	34.13	---	---	---	---	---	---	---	---
Science	660	186	22.78	22.78	95	27	24.95	24.95	135	21	34.13	34.13	---	---	---	---	---	---	---	---
Health	335	186	11.22	11.22	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Guidance	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Art	275	186	8.40	8.40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Physical Education	435	186	14.25	14.25	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Home Economics	420	186	11.38	11.38	40	27	10.30	11.21	60	21	17.07	17.07	---	---	---	---	---	---	---	---
Industrial Arts	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Religious Instruction	960*	186	8.56	8.56	125	27	21.36	21.36	---	---	---	---	---	---	---	---	---	---	---	---
Direct/Indirect Per Pupil	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Average Cost†	---	186	340.15	340.15	---	27	362.49	362.49	---	21	426.91	426.91	---	---	---	---	---	13	---	215.43
Supplementary Per Pupil	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Cost ‡	---	186	241.44	241.44	---	27	342.47	342.47	---	21	317.92	317.92	---	---	---	---	---	13	---	565.73
Average Per Pupil Cost †	---	186	581.69	581.69	---	27	704.96	704.96	---	21	744.83	744.83	---	---	---	---	---	13	---	781.16

*Total time for Grades 3 to 6 inclusive

**Total time for Grades 1 to 6 inclusive.

†Based on the actual number of students in yearly attendance.

Music, low in per pupil cost due primarily to the limited amount of time expended on these courses.

When large enrollments and lesser amounts of time per pupil were expended, low costs were incurred for Opening Exercises, Home Room Period and Special Supervision. Low enrollments created high costs for Creative English and French in Plamondon School, a program wherein students undertake language programs in their respective tongues.

Examination of Average Per Pupil Costs revealed that schools located in the Town of Lac La Biche incurred the least average cost per pupil in comparison to schools located at outlying points within the Division. Average per pupil costs ranged from \$1,224.37 per pupil (Grade Two in Rich Lake School) to \$577.65 (Grade One in Central School). It must be noted, however, that the Rich Lake School cost was based on equal division of teachers' time in a classroom containing three grades, the lowest enrollment being in Grade Two. Nevertheless, higher implementary costs (primarily for transportation and provision of other services) contributed to the higher average per pupil costs in the outlying schools. Table 39 (Direct Costs), Table 40 (Indirect Costs), and Table 44 (Implementary Costs) in Appendix C of this study have illustrated the variance in costs per school in Division I.

Grade Four

Table 11 has illustrated the courses and costs in the schools offering Grade Four. Reading/Phonics at \$272.42 per pupil in Wandering River School was the most expensive course. Reading / Phonics was also the most expensive course

TABLE 11
ENROLLED PUPIL COSTS OF GRADE FOUR STUDENTS IN THE SCHOOLS
OF THE IAC LA BICHE SCHOOL DIVISION

Course	V. M. Welsh				Pitman/Don				Caslan				Wandering River				Rich Lake			
	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil
Opening Exercises	120	140	5.16	5.16	--	--	--	--	12	11	4.68	4.68	--	--	34.40	--	--	--	--	--
Supervised Study	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Homework Period	225*	169	1.73	1.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Special Supervision	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Remedial Instruction	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Language	1,090	169	40.05	40.05	125	21	27.47	27.47	97	11	42.76	42.76	--	--	49.28	49.28	67	8	55.88	55.88
Printing or Writing	250	169	8.90	8.90	25	21	8.15	8.15	--	--	--	--	--	--	23.89	23.89	16	8	12.70	12.70
Reading and Phonics	2,435	169	89.90	89.90	275	21	60.56	60.56	187	11	82.85	82.85	--	--	272.42	272.42	105	8	86.90	86.90
Library and/or Storytime	--	--	--	--	65	21	16.76	16.76	--	--	--	--	--	--	--	--	--	--	--	--
Spelling	585	169	21.56	21.56	75	21	25.46	25.46	45	11	20.05	20.05	--	--	38.08	38.08	25	8	20.32	20.32
Creative English	--	--	--	--	125	19	38.46	38.46	--	--	--	--	--	--	--	--	--	--	--	--
Mathematics	1,305	169	52.49	52.49	200	21	44.02	44.02	112	11	49.95	49.95	--	--	134.10	134.10	67	8	55.88	55.88
Social Studies	1,065	169	38.93	38.93	120	21	26.48	26.48	115	11	50.78	50.78	--	--	53.64	53.64	50	8	41.91	41.91
Science	640	169	24.60	24.60	120	21	26.48	26.48	90	11	40.09	40.47	--	--	73.17	73.17	50	8	41.91	41.91
Health	270	169	9.93	9.93	40	21	8.60	8.60	22	11	9.35	9.35	--	--	36.17	36.17	--	--	--	--
Guidance	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Music	210	169	7.77	7.77	--	--	--	--	22	11	9.35	9.35	--	--	37.33	37.33	20	8	16.51	16.51
Art	360	169	13.17	13.17	40	21	8.60	8.60	--	--	--	--	--	--	37.11	37.11	45	8	41.91	41.91
Physical Education	315	169	9.39	9.39	40	21	9.68	10.79	45	11	20.96	20.96	--	--	48.78	48.78	50	8	41.91	42.88
Home Economics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Religion	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Religious Instruction	950*	169	8.56	8.56	125	21	27.47	27.47	--	--	--	--	235**	5	21.31	21.31	--	--	--	--
Direct/Indirect Per Pupil Average Cost†	169		331.26		21		337.22		11		330.08		5		879.67		8		418.80	
Implementary Per Pupil Cost‡	169		243.19		21		372.81		11		314.35		5		484.97		8		604.78	
Average Per Pupil Cost†	169		574.45		21		710.03		11		644.43		5		1364.64		8		1023.58	

*Total time for grades 3 to 6 inclusive.

**Total time for grades 1 to 6 inclusive.

†Based on the actual number of students in yearly attendance.

in the other schools, with the exception of the low enrollment Creative English course in Plamondon School. Mathematics was the second most expensive course in all five schools. Both Reading/Phonics and Mathematics appeared more expensive due to the longer period of time expended in instruction. The Special Supervision Course in V. M. Welsh School at \$1.73 per pupil was the least expensive; but generally, inexpensive courses were either Opening Exercises, Supervised Study, Music, Health, or Art reflecting the lesser amounts of instruction time devoted to these courses from school to school.

Grade Five

Table 12 has portrayed the courses and costs offered in Grade Five. The most expensive course was Reading/Phonics at \$118.53 per pupil in Rich Lake School. The more extensive time devoted to Reading/Phonics also elevated that course to be most expensive in V. M. Welsh, Caslan, and Wandering River schools, although at a lower per pupil cost. However, the low enrollment in Creative English in Plamondon School made that course most expensive (\$97.30 per pupil) in Plamondon's Grade Five program, and relegated Reading/Phonics to the second most expensive course. In three of the other four schools, Mathematics was the second most expensive course, but was edged out by Social Studies in the Caslan School. Special Supervision at \$1.73 per pupil in V. M. Welsh School was the least expensive course, although Opening Exercises, Music, Health, and Art were generally of small expense.

TABLE 12

ENROLLED PUPIL COSTS OF GRADE FIVE STUDENTS IN THE SCHOOLS OF THE LAC LA BICHE SCHOOL DIVISION

Course	V. M. Welsh				Plan ondon				Casian				Wandering River				Rich Lake			
	Min. Per Week.	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Pupil	Min. Per Week.	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Pupil	Min. Per Week.	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Pupil	Min. Per Week.	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Pupil	Min. Per Week.	Pupil Enrol.	Dir. Cost Per Enrol.	Dir. & Ind. Cost Per Pupil
Opening Exercises	75	93	3.75	3.75	--	--	--	--	13	15	3.92	3.92	--	67	12	29.04	--	--	--	--
Supervised Study	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Home Room Period	225*	152	1.73	1.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Special Supervision	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Remedial Instruction	975	152	31.68	31.68	150	20	34.75	34.75	98	15	31.85	31.85	72	12	29.24	29.24	67	6	74.51	74.51
Language	225	152	6.91	6.91	30	20	6.95	6.95	--	--	--	--	25	12	9.95	9.95	16	6	16.93	16.93
Reading or Writing	1,775	152	57.55	57.55	250	20	57.68	57.68	188	15	61.25	61.25	97	12	52.35	52.35	105	6	118.53	118.53
Reading and Phonics	90	59	7.96	7.96	40	20	9.03	9.03	--	--	--	--	22	12	10.03	10.03	--	--	--	--
Library and or Storytime	445	152	14.43	14.43	60	20	13.90	13.90	45	15	14.70	14.70	30	12	15.86	15.86	25	6	27.09	27.09
Spelling	--	--	--	--	85	4	97.30	97.30	--	--	--	--	--	--	--	--	--	--	--	--
Creative English	--	--	--	--	125	16	43.16	43.16	--	--	--	--	--	--	--	--	--	--	--	--
French	1,070	152	40.27	40.27	200	20	46.22	46.22	113	15	36.75	36.75	112	12	55.13	55.13	67	6	74.51	74.51
Mathematics	970	152	31.75	31.75	125	20	27.80	27.80	105	15	37.40	37.40	67	12	46.23	46.23	50	6	55.88	55.88
Social Studies	635	152	24.22	24.22	125	20	27.80	27.80	105	15	37.40	37.40	67	12	46.23	46.23	50	6	55.88	55.88
Science	225	152	7.47	7.47	--	--	--	--	23	15	7.35	7.35	27	12	14.28	14.28	--	--	--	--
Health	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Guidance	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Music	202	274	3.40	3.40	--	--	--	--	23	15	7.35	7.35	45	12	18.66	18.66	20	6	22.01	22.01
Art	300	152	9.66	9.66	--	--	--	--	--	--	--	--	22	12	11.90	11.90	50	6	55.88	55.88
Physical Education	225	152	7.46	7.46	80	20	20.75	20.75	45	15	14.70	14.95	60	12	27.10	27.10	50	6	55.88	55.88
Home Economics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Industrial Arts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Religious Instruction	960*	152	8.56	8.56	150	20	38.17	38.17	--	--	--	--	23**	12	21.31	21.31	--	--	--	--
Direct/Indirect Per Pupil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Average Cost†	--	152	253.20	253.20	--	20	310.54	310.54	--	15	245.18	245.18	--	12	364.91	364.91	--	6	558.08	558.08
Implementary Per Pupil	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cost†	--	152	245.33	245.33	--	20	378.66	378.66	--	15	294.31	294.31	--	12	383.65	383.65	--	6	638.63	638.63
Average Per Pupil Cost†	--	152	498.53	498.53	--	20	689.20	689.20	--	15	539.49	539.49	--	12	748.56	748.56	--	6	1196.71	1196.71

* Total time for grades 3 to 6 inclusive

** Total time for grades 1 to 6 inclusive

† Based on the actual number of students in yearly attendance.

Grade Six

Table 13 has illustrated the costs and courses of Grade Six school programs. At \$164.63 per pupil, V. M. Welsh's Home Economics is the most expensive course, due primarily to the large amount of time and smaller enrollment. Various courses were not as expensive in other schools, which apparently indicated the priorities in time established by individual schools. Mathematics was most expensive for both Plamondon (\$92.32 per pupil) and Wandering River (\$41.91 per pupil). Reading/Phonics in Caslan School (\$152.47 per pupil) and Rich Lake School (\$88.90) marked their respective most expensive courses. No specific course was found to be second most expensive. Least expensive of all Grade Six courses was V. M. Welsh's Special Supervision at \$1.73 per pupil; however, Art and Health were relatively inexpensive for most schools.

Division II

Generally, all schools expended a large amount of time, and consequently expenditures for direct salaries, on Reading/Phonics thereby creating that course as most expensive in Grade Four, Grade Five and in some Grade Six schools. Mathematics was often the second most expensive course, while the lesser amounts of time devoted to Art, Health, and Music usually made them the least expensive for the three Grades.

However, decreasing times in Reading/Phonics at the Grade Six level created several exceptions to the previous statements. High costs were encountered when a reasonably

TABLE 13
ENROLLED PUPIL COSTS OF GRADE SIX STUDENTS IN THE SCHOOLS
OF THE LAC LA BICHE SCHOOL DIVISION

Courses	V. M. Welch					Plamondon					Caslan					Wandering River					Rich Lake					
	Min.		Dir. & Ind. Cost Per		Dir. & Ind. Cost Per Pupil	Min. Pupil Per Week Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil	Min. Pupil Per Week Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil	Min. Pupil Per Week Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil	Min. Pupil Per Week Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil	Min. Pupil Per Week Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil	
	Per Week	Enrol.	Pupil	Enrol.			Per Week	Enrol.			Per Week	Enrol.			Per Week	Enrol.			Per Week	Enrol.			Per Week	Enrol.		Per Week
Opening Exercises	45	34	11.47	--	--	25	--	22	6.05	6.05	--	--	--	--	--	68	16	22.24	--	--	--	--	--	--	--	
Supervised Study	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Home Room Period	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Special Supervision	223*	147	1.73	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Remedial Instruction	1,125	147	6.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Reading or Writing	1,125	147	45.39	45.39	--	180	--	22	45.38	45.38	--	--	75.11	73	16	23.40	25	16	7.47	7.47	16	8	55.88	55.88	12.70	12.70
Pictorial or Phonics	1,125	147	5.86	5.86	--	--	--	22	56.73	56.73	405	17	152.47	152.47	98	16	39.86	39.86	105	8	88.90	88.90	20.32	20.32		
Library and/or Storytime	1,675	147	72.74	72.74	--	225	--	22	7.56	7.56	--	--	33.88	30	16	11.90	25	8	20.32	20.32	41.91	41.91	42.88	42.88		
Spelling	420	147	16.32	16.32	--	100	--	22	24.96	24.96	90	17	33.88	33.88	--	--	--	--	--	--	--	--	--	--		
Creative English	--	--	--	--	--	4	--	4	92.09	92.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
French	--	--	--	--	--	125	--	18	38.36	38.36	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Mathematics	1,180	147	56.08	56.08	--	400	--	22	92.32	92.32	225	17	84.71	84.71	113	16	41.91	41.91	67	8	55.88	55.88	41.91	41.91		
Social Studies	890	121	42.20	42.20	--	120	--	22	30.25	30.25	175	16	85.91	85.91	50	8	41.91	41.91	50	8	41.91	41.91	41.91	41.91		
Science	515	147	22.63	22.63	--	180	--	22	41.64	41.64	22	17	83.53	83.53	68	16	23.87	23.87	50	8	41.91	41.91	41.91	41.91		
Health	185	121	8.74	8.74	--	--	--	--	--	--	30	17	11.29	11.29	28	16	11.30	11.30	--	--	--	--	--	--		
Guidance	45	34	7.70	7.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Music	97	147	6.74	6.74	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Physical Education	240	121	11.90	11.90	--	40	--	22	9.83	9.83	60	17	22.59	22.59	45	16	14.00	14.00	20	8	16.51	16.51	41.91	41.91		
Home Economics	225	147	7.71	7.71	--	80	--	22	18.86	19.77	90	17	33.88	34.13	60	16	20.32	20.32	50	8	41.91	41.91	42.88	42.88		
Industrial Arts	200	8	164.63	164.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Religious Instruction	960*	147	8.56	8.56	--	150	--	22	34.70	34.70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Direct/Indirect Per Pupil																										
Average Cost†	147	336.11				22	417.72				17	564.81				16	283.29				8	418.80				
Implementary Per Pupil	147	247.61				22	368.21				17	336.44				16	365.56				8	604.78				
Average Per Pupil Cost‡	147	583.72				22	785.93				17	901.25				16	648.85				8	1023.58				

*Total time for grades 3 to 6 inclusive.

**Total time for grades 3 to 6 inclusive.

†Based on the actual number of students in yearly attendance.

large amount of time was joined by a small course enrollment. Examples of these situations were the Home Economics and Industrial Arts courses offered to twenty-two students in Grade Six in V. M. Welsh School. Conversely, meagre time expenditure coupled with large enrollments, such as the Special Supervision Course in V. M. Welsh, created the lowest extreme in costs.

While the split nature (several grades in one classroom) created unusual costs due to small enrollments, and caused some exceptions, in general, average per pupil costs were lower in the larger schools--in fact V. M. Welsh School was consistently lower than all of the other schools. With average salaries lower than other schools (refer to Table 5) for this level, and with larger course enrollments, V. M. Welsh School averaged \$304.39 per pupil for the three grade levels, while the other four schools ranged between \$355.57 to \$440.57 per pupil in terms of direct salaries alone (refer to Table 39 in Appendix C). Extremes in average per pupil costs in schools offering Division II courses ranged from \$1,364.64 per pupil (Grade Four, Wandering River) down to \$498.53 per pupil (Grade Five, V. M. Welsh), apparently reflecting the extremes in enrollments coupled with differences in average salaries. Tables 39, 41, and 44 in Appendix C contain additional information for this level.

Grade Seven

Four schools offered Grade Seven courses in the Division. Table 14 has illustrated the courses and costs.

TABLE 14

ENROLLED PUPIL COSTS OF GRADE SEVEN STUDENTS IN THE SCHOOL OF THE LAC LA BICHE SCHOOL DIVISION

Course	Dr. Swift				Piamondon				Wandering River				Rich Lake			
	Min.	Pupil	Dir. Cost	Dir. & Ind.	Min.	Pupil	Dir. Cost	Dir. & Ind.	Min.	Pupil	Dir. Cost	Dir. & Ind.	Min.	Pupil	Dir. Cost	Dir. & Ind.
	Per Week	Enrol.	Per Enrol.	Cost Per Enrol.	Per Week	Enrol.	Per Enrol.	Cost Per Enrol.	Per Week	Enrol.	Per Enrol.	Cost Per Enrol.	Per Week	Enrol.	Per Enrol.	Cost Per Enrol.
Opening Exercises	--	--	--	--	--	--	--	--	--	--	--	--	10	7	7.39	7.39
Supervised Study	--	--	--	--	--	--	--	--	89	7	67.65	67.65	--	--	--	--
Home Room Period	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Special Supervision	225*	136	3.23	3.23	--	--	--	--	--	--	--	--	--	--	--	--
Religious Instruction	800	136	31.85	31.85	100	23	21.11	21.11	--	--	--	--	90	7	73.89	73.89
Language	480	136	17.99	17.99	400	23	89.02	89.02	120	7	98.29	98.29	75	7	61.57	61.57
Reading and Phonics	--	--	--	--	--	--	--	--	42	7	38.08	38.08	--	--	--	--
Library	--	--	--	--	--	--	--	--	--	--	--	--	45	7	36.94	36.94
Spelling	--	--	22.05	22.05	--	--	--	--	--	--	--	--	60	7	49.26	49.26
Literature	480	136	22.05	22.05	200	23	44.51	44.51	90	7	73.71	73.71	90	7	73.89	73.89
Mathematics	1,000	136	42.53	42.53	80*	4	37.23	37.23	--	--	--	--	75	7	61.57	61.57
Vocational Math.	--	--	--	--	200	23	57.02	57.02	90	7	76.63	76.63	--	--	--	--
Social Studies	800	136	31.83	31.83	--	--	--	--	--	--	--	--	75	7	61.57	61.57
Sociology	480	136	25.57	25.57	--	--	--	--	80	7	61.56	61.56	--	--	--	--
Geography	--	--	--	--	200	23	44.51	44.51	--	--	--	--	60	7	49.26	49.26
Science	640	136	22.07	22.07	--	--	--	--	--	--	--	--	25	7	19.70	19.70
Biology	--	--	--	--	120*	3	61.42	61.42	55	7	50.31	50.31	--	--	--	--
Agriculture	--	--	13.20	13.20	--	--	--	--	--	--	--	--	--	--	--	--
Health	320	136	18.13	18.13	40	23	7.63	7.63	45	7	36.86	36.86	76	7	61.57	61.57
Guidance	320	136	23.27	23.27	60	9	32.19	32.19	37	7	29.49	29.49	--	--	--	--
Music	480	136	19.63	19.63	--	--	--	--	--	--	--	--	--	--	--	--
Art	--	--	--	--	120	23	27.06	27.06	--	--	--	--	--	--	--	--
Drama	--	--	--	--	65	19	18.08	18.08	--	--	--	--	--	--	--	--
French	--	--	--	--	100*	3	65.42	65.42	--	--	--	--	26	7	20.93	20.93
Typewriting	320	136	14.65	14.65	50	23	11.03	11.03	80	7	61.56	61.56	--	--	--	--
Phys. Educ.	480	68	31.08	31.08	--	--	--	--	--	--	--	--	--	--	--	--
Home Econ.	480	68	36.34	36.34	--	--	--	--	--	--	--	--	--	--	--	--
Industrial Arts	480	68	101.73	101.73	--	--	--	--	--	--	--	--	--	--	--	--
Direct/Indirect Average Per Pupil Cost**		136	339.71	339.71		23	353.73	353.73		7	606.41	606.41		7	612.99	612.99
Implementary Per Pupil Cost**		136	341.65	341.65		23	352.16	352.16		7	435.35	435.35		7	682.58	682.58
Average Per Pupil Cost**		136	681.37	681.37		23	705.89	705.89		7	1041.76	1041.76		7	1295.57	1295.57

*Includes Grades 7 to 9

** Based on the actual number of pupils in yearly attendance.

With a high indirect cost, Industrial Arts in Dr. Swift School at \$101.73 per pupil was the most expensive course. In Plamondon, Wandering River, and Rich Lake schools the most expensive course was Language (ranging between \$73.89 and \$98.29 per pupil). Second highest courses varied from school to school with the vagaries in time devoted and enrollments. At \$3.23 per pupil, Special Supervision at Dr. Swift School was the least expensive course, but a common least expensive course in all schools was not found, possibly due to variations in enrollments and offerings.

Grade Eight

Table 15 has portrayed the courses and costs of the schools that offered Grade Eight. The most expensive course was Language at \$98.29 per pupil in Wandering River School. Language was also the highest in Rich Lake (\$86.20) and Plamondon (\$93.21) schools, but Mathematics at \$48.94 per pupil was the most expensive course in the V. M. Welsh School. Social Studies in Plamondon and Wandering River, Mathematics (which actually tied for most expensive course) in Rich Lake, and Language in Dr. Swift were the second most expensive courses. Least expensive of all courses was Special Supervision at \$3.23 per pupil in Dr. Swift School, while Guidance, Reading/Phonics, and Opening Exercises were lowest in Plamondon, Wandering River, and Rich Lake schools respectively.

TABLE 15

ENROLLED PUPIL COSTS OF GRADE EIGHT STUDENTS IN THE SCHOOLS OF THE LAC LA BICHE SCHOOL DIVISION

Course	Dr. Swift				Plamondon				Wandering River				Rich Lake			
	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil	Min. Per Week	Pupil Enrol.	Dir. Cost Per Enrol. Pupil	Dir. & Ind. Cost Per Enr. Pupil
Opening Exercises	--	--	--	--	--	21	19.50	19.50	--	--	--	--	10	6	8.62	--
Supervised Study	--	--	--	--	--	--	--	--	--	--	69.99	69.99	--	--	--	--
Home Room Period	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Special Supervision	225*	123	3.23	3.23	--	--	--	--	--	--	--	--	--	--	--	86.20
Religious Instruction	--	--	--	--	100	21	23.12	93.21	--	7	98.29	78.29	90	6	86.20	71.83
Language	800	123	35.52	35.52	400	21	93.21	93.21	120	7	12.29	12.29	75	6	71.83	--
Reading and Phonics	480	123	20.98	20.98	--	--	--	--	43	7	39.44	39.44	45	6	43.10	57.47
Library	40	15	17.38	17.38	--	--	--	--	--	--	--	--	60	6	86.20	89.20
Spelling	--	--	--	--	--	--	--	--	--	--	73.71	73.71	90	--	--	--
Literature	480	123	22.06	22.06	--	21	46.61	46.61	90	--	--	--	--	--	71.83	--
Mathematics	1,000	123	48.94	48.94	200	21	37.23	37.23	90	7	76.63	76.63	75	6	40.23	40.23
Voc. Math.	--	--	--	--	80*	21	75.50	75.50	--	--	--	--	--	--	71.83	71.83
Social Studies	800	123	34.21	34.21	200	--	--	--	--	--	--	--	75	6	--	--
Sociology	--	--	--	--	--	--	--	--	--	--	61.56	61.56	60	6	57.47	57.47
Geography	640	123	28.16	31.56	200	21	48.75	49.13	80	7	--	--	25	6	22.99	22.99
Science	480	123	18.27	18.27	--	--	--	--	--	--	50.31	50.31	--	--	--	--
Biology	--	--	--	--	--	--	--	--	55	7	--	--	--	--	--	--
Agriculture	320	123	12.54	12.54	--	--	--	--	--	--	36.86	36.86	--	--	71.83	--
Health	320	123	20.04	20.04	40	21	8.36	8.36	45	7	30.71	30.71	76	6	--	--
Guidance	560	123	30.28	30.28	60	10	28.97	28.97	38	7	--	--	--	--	--	--
Music	480	123	21.70	21.70	--	--	--	--	--	--	--	--	--	--	--	--
Art	--	--	--	--	120	21	29.64	29.64	--	--	--	--	--	--	--	--
Drama	--	--	--	--	75	19	20.55	20.55	--	--	--	--	--	--	--	25.39
French	--	--	--	--	100*	3	65.42	65.42	80	7	61.56	61.56	26	6	24.42	--
Typewriting	--	--	--	--	100	21	24.52	25.43	--	--	--	--	--	--	--	--
Physical Education	320	123	16.19	17.25	--	--	--	--	--	--	--	--	--	--	--	--
Home Economics	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Industrial Arts	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Direct/Indirect Average Per Pupil Cost**	--	123	--	318.71	--	21	414.00	414.00	--	7	611.35	611.35	--	6	714.99	--
Implementary Per Pupil Cost**	--	123	--	350.53	--	21	377.51	377.51	--	7	435.35	435.35	--	6	710.47	--
Average Per Pupil Cost**	--	123	--	669.24	--	21	791.51	791.51	--	7	1046.70	1046.70	--	6	1425.46	--

*Includes grades 7 to 9.

**Based on the actual number of pupils in yearly attendance.

Grade Nine

Only three schools offered Grade Nine courses as Table 16 has indicated. The most expensive course in all schools was Language at \$119.08 per pupil in Wandering River School. Language at \$75.29 per pupil was also highest in Plamondon School, but Industrial Arts at \$115.82 per pupil was highest in Dr. Swift School. Mathematics, Typing, and Socail Studies were second most expensive in Dr. Swift, Plamondon, and Wandering River schools respectively. Least expensive was Special Supervision at \$3.23 per pupil in Dr. Swift School. However, Health (\$14.97), Guidance (\$13.50), and Reading (\$6.62) were also inexpensive courses in Grade Nine.

Division III

Tables 14, 15, and 16 have revealed the costs of courses offered by the schools of Lac La Biche Division in Grades Seven, Eight, and Nine. The most expensive course for all schools and the three grade levels was Grade Nine Language in Wandering River School at \$119.08 per pupil which reflected the comparatively high expenditure of time and low enrollment. The least expensive course, Special Supervision in all three grades of V. M. Welsh School, was \$3.23 per pupil reflecting a relatively small amount of time coupled with a large enrollment. With the exception of Dr. Swift School, the other schools had generally higher per pupil costs for Language, primarily due to the large amount of time devoted to that course. Noticeable among the costs

TABLE 16

ENROLLED PUPIL COSTS OF GRADE NINE STUDENTS IN THE SCHOOLS OF THE LAC LA BICHE SCHOOL DIVISION

Course	Dr. Swift				Plamondon				Wandering River			
	Dir. Cost		Dir. & Ind. Cost Per		Dir. Cost		Dir. & Ind. Cost Per		Dir. Cost		Dir. & Ind. Cost Per	
	Min. Per Week	Pupil Enrol.	Per Enrol.	Min. Per Week	Pupil Enrol.	Per Enrol.	Min. Per Week	Pupil Enrol.	Min. Per Week	Pupil Enrol.	Min. Per Week	Pupil Enrol.
Opening Exercises	--	--	--	--	--	--	--	--	--	--	--	--
Supervised Study	--	--	--	--	--	--	--	--	85	13	35.02	35.02
Home Room Period	--	--	--	--	--	--	--	--	--	--	--	--
Special Supervision	225*	117	3.23	--	--	--	--	--	--	--	--	--
Religious Instruction	--	--	--	100	26	28.55	--	--	--	--	--	--
Language	800	117	33.74	400	26	75.29	270	13	119.08	13	119.08	119.08
Reading and Phonics	480	117	22.35	--	--	--	15	13	6.62	13	6.62	6.62
Library	--	--	--	--	--	--	75	13	37.34	13	37.34	37.34
Spelling	--	--	--	--	--	--	--	--	--	--	--	--
Literature	480	117	27.95	--	--	--	--	--	--	--	--	--
Mathematics	880	117	50.22	200	26	39.38	39.38	13	79.38	13	79.38	79.38
Vocational Mathematics	--	--	--	80*	6	37.23	37.23	--	--	--	--	--
Social Studies	800	117	32.62	200	26	39.90	39.90	13	82.52	13	82.52	82.52
Sociology	--	--	--	--	--	--	--	--	--	--	--	--
Geography	--	--	--	--	--	--	--	--	--	--	--	--
Science	640	117	27.92	200	26	57.11	57.49	13	70.67	13	70.67	70.67
Biology	--	--	--	--	--	--	--	--	--	--	--	--
Agriculture	--	--	--	120*	7	61.42	61.42	--	--	--	--	--
Health	320	117	14.97	--	--	--	--	--	100	13	49.79	49.79
Guidance	320	117	16.65	80	26	13.50	13.50	45	18.76	13	18.76	18.76
Music	480	117	27.21	60	9	48.98	48.98	90	39.69	13	39.69	39.69
Art	--	--	--	120	26	33.91	33.91	--	--	--	--	--
Drama	--	--	--	--	--	--	--	90	34.46	13	34.46	34.46
French	480	117	21.24	110	17	43.09	43.09	--	--	--	--	--
Typing	--	--	--	100*	3	65.42	65.42	--	--	--	--	--
Physical Education	320	117	17.02	100	26	19.80	20.71	80	33.15	13	33.15	33.15
Home Economics	480	68	31.08	--	--	--	--	--	--	--	--	--
Industrial Arts	480	49	50.43	--	--	--	--	--	--	--	--	--
Direct/Indirect Average Per Pupil Cost**	117		368.33	26		386.53		13			606.48	
Implementary Per Pupil Cost**	117		364.74	26		354.94		13			444.88	
Average Per Pupil Cost**	117		733.06	26		741.47		13			1051.36	

*Includes Grades 7 to 9.

**Based on the actual number of pupils in yearly attendance.

was the \$65.39 per enrolled pupil indirect cost (for equipment and materials) charged to each enrolled pupil in Industrial Arts in Dr. Swift School (Grades Seven and Nine) --costs that exceeded the direct per enrolled pupil cost. Yet, in general, courses in Dr. Swift School, due primarily to larger course enrollments, were less expensive than similar courses offered in the other schools.

Direct (refer to Table 39 of Appendix C), Direct/Indirect, most Implementary, and Average Per Pupil Costs for the three grade levels of this Division were lower in Dr. Swift School than in the other schools. This probably was the result of larger course enrollments, despite the fact that Dr. Swift School offered two to three more courses per grade level than any of the remaining schools. Average per pupil costs ranged from a high of \$1,425.46 per pupil in Grade Eight in Rich Lake School to a low of \$669.24 per pupil in Grade Eight in Dr. Swift School, reflecting extremes in enrollments coupled with salary differences. Additional information may be found in Tables 39, 42, and 44 of Appendix C.

Grade Ten

Table 17 has presented the courses and costs offered by the two schools in Grade Ten. The most expensive course was Mathematics 12 at \$183.02 per pupil in J. A. Williams School reflecting the low enrollment in the course. Science 11 in Plamondon School, again reflecting low enrollment, at \$165.22 per pupil was the most expensive course in Plamondon School, and the second most expensive course in both schools.

TABLE 17

ENROLLED PUPIL COSTS OF GRADE TEN STUDENTS IN THE SCHOOLS OF LAC LA BICHE SCHOOL DIVISION

Course	J. A. Williams									
	Dir. Cost					Dir. & Ind. Cost Per				
	Min. Per Week	Pupil Enrol.	Per Pupil	Enrol.	Dir. Cost	Min. Per Week	Pupil Enrol.	Per Pupil	Dir. Cost	Dir. & Ind. Cost Per
Supervision	1,112*	40	67.19	67.19	67.19	--	--	--	--	--
Religious Instruction	--	--	--	--	--	100	21	35.35	35.35	35.35
English 10	1,200	135	35.40	35.40	35.40	200	21	69.05	69.05	69.05
Literature 11	100	9	72.43	72.43	72.43	--	--	--	--	--
Reading 10	400	38	62.52	62.52	62.52	100	26	16.81	16.81	16.81
Social Studies 10	1,000	105	76.11	76.11	76.11	200	21	49.40	49.40	49.40
Mathematics 10	200	32	30.02	30.02	30.02	200	12	132.12	132.12	132.12
Mathematics 11	400	30	71.17	71.17	71.17	--	--	--	--	--
Mathematics 12	200	9	183.02	183.02	183.02	--	--	--	--	--
Mathematics (Rem)	200	41	40.18	40.18	40.18	200	30	39.25	39.25	39.25
Biology 10	300	60	27.92	27.92	27.92	--	--	--	--	--
Chemistry 10	300	52	47.92	47.92	47.92	100	12	66.06	66.06	66.30
Physics 10	100	7	118.67	118.67	118.67	100	12	66.06	66.06	66.30
Science 11	600	54	68.57	68.57	68.57	200	9	164.98	164.98	165.22
French 10	400	42	51.43	51.43	51.43	100	20	37.12	37.12	37.12
Music 10	200	10	86.55	86.55	86.55	--	--	--	--	--
Music 11	200	13	66.57	66.57	66.57	--	--	--	--	--
Physical Education 10	1,200	124	65.47	65.47	65.47	100	21	24.52	24.52	25.43
Bookkeeping 10	400	25	131.78	155.50	155.50	--	--	--	--	--
Typewriting 10	1,000	202	24.81	48.53	48.53	200	20	58.88	58.88	63.81
Fabrics and Dress 10	400	30	93.65	93.65	93.65	--	--	--	--	--
Foods and Nutrition 10	400	16	163.87	163.87	163.87	--	--	--	--	--
Home Economics 10	400	28	93.90	93.90	93.90	--	--	--	--	--
Ind. Arts General 10	800	43	118.77	118.77	118.77	--	--	--	--	--
Ind. Arts Electronics 10	400	26	66.40	66.40	66.40	--	--	--	--	--
Ind. Arts Power Mech. 10	800	41	110.98	110.98	110.98	--	--	--	--	--
Direct/Indirect Average Per Pupil Cost**		98		803.88	803.88		21		576.50	
Implementary Per Pupil Cost**		98		478.23	478.23		21		442.77	
Average Per Pupil Cost**		98		1282.11	1282.11		21		1019.27	

* Includes Grades 10 to 12

** Based on the actual number of students in yearly attendance.

Physics 10, Bookkeeping 10, Foods and Nutrition 10, Industrial Arts General 10, Industrial Arts Power Mechanics 10, and Mathematics 10 were more expensive (exceeding \$100.00 per pupil) than other courses due primarily to low enrollments and/or large amounts of instruction time. Least expensive of all was Reading 10 at \$16.81 per pupil in Plamondon School (a course with low expenditure of time and above average enrollment).

Grade Eleven

Grade Eleven courses and costs have been illustrated in Table 18. Most expensive of all courses was Mathematics 22 in J. A. Williams School at \$411.80 per pupil, the high cost being attributed primarily to the low enrollment (four students). Second most expensive was Fabrics and Dress 20 at \$280.95 per pupil in J. A. Williams School, again reflecting a very low course enrollment. Costs were high for a similar reason in Mathematics 20 (Plamondon's most expensive course at \$164.98 per pupil), Clerical Practice 20, Data Processing 22, Typewriting 20, and Home Economics 21. Least expensive of all courses was Social Studies 20 in J. A. Williams School at \$30.76 per pupil, apparently of less cost due to a lower rate of salary for the teacher involved since time and enrollment were not unusual in comparison to other courses.

Grade Twelve

Table 19 has illustrated the courses and costs of

TABLE 18

ENROLLED PUPIL COSTS OF GRADE ELEVEN STUDENTS IN THE SCHOOLS OF LAC LA BICHE SCHOOL DIVISION

Course	J. A. Williams				Plamondon			
	Min. Per Week	Pupil Enrol.	Dir. Cost		Min. Per Week	Pupil Enrol.	Dir. Cost	
			Per Enrol.	Enr. Pupil			Per Enrol.	Enr. Pupil
Supervision	1,112*	35	67.19	67.19	300**	21	44.73	44.73
Religious Instruction	--	--	--	--	--	--	--	--
English 20	400	60	45.18	45.18	--	--	--	--
English 23	200	17	93.88	93.88	200	19	76.32	76.32
Language 22	--	--	--	--	200	19	76.32	76.32
Literature 21	400	49	52.68	52.68	--	--	--	--
Social Studies 20	400	48	30.76	30.76	200	19	54.60	54.60
Psychology 20	200	22	33.55	33.55	--	--	--	--
Sociology 20	200	19	84.00	84.00	100	22	33.75	33.75
Mathematics 20	400	43	74.25	74.25	200	9	164.98	164.98
Mathematics 21	200	18	91.51	91.51	--	--	--	--
Mathematics 22	200	4	411.80	411.80	--	--	--	--
Biology 20	200	31	35.89	35.89	--	--	--	--
Chemistry 20	200	34	40.79	40.79	100	15	52.85	53.11
Physics 20	100	20	41.53	41.53	100	12	66.06	66.44
French 20	400	30	72.00	72.00	200	20	43.86	43.86
Law 20	200	19	47.61	47.61	--	--	--	--
Physical Education 20	400	31	87.22	87.22	--	--	--	--
Clerical Practice 20	200	11	82.23	105.95	--	--	--	--
Data Processing 22	200	19	86.69	110.41	--	--	--	--
Typewriting 20	200	10	90.45	114.17	100	16	36.80	41.73
Fabrics and Dress 20	200	5	280.95	280.95	--	--	--	--
Home Economics 21	200	12	117.06	117.06	--	--	--	--
Ind. Arts General 20	400	30	57.54	57.54	--	--	--	--
"Extra-Curricular"†	--	--	--	--	--	19	--	0.91
Direct/Indirect Average Per Pupil Cost ††		78		482.35		19		535.78
Implementary Per Pupil Cost ††		78		490.74		19		456.69
Average Per Pupil Cost ††		78		973.09		19		992.47

* Includes Grades 10 to 12.

** Includes Grades 11 and 12

† Indirect cost, extra curricular sports, applicable if physical education not provided.

†† Based on the actual number of students in yearly attendance.

TABLE 19

ENROLLED PUPIL COSTS OF GRADE TWELVE STUDENTS IN THE SCHOOLS OF LAC LA BICHE SCHOOL DIVISION

Course	J. A. Williams						Plamondon					
	Min.			Dir. Cost			Dir. & Ind.			Min.		
	Per Week	Pupil	Enrol.	Per Enrol.	Pupil	Enrol.	Cost Per Enrol.	Pupil	Enrol.	Per Week	Pupil	Enrol.
Supervision	1,112*	35		67.19			67.19			300**	21	44.73
Religious Instruction	--	--		--			--			--	--	--
English 30	400	41		62.96			62.96			200	10	145.00
English 33	400	44		58.67			58.67			--	--	--
Social Studies 30	400	42		69.05			69.05			200	10	87.72
Social Studies 36	200	30		36.02			36.02			--	--	--
Economics 30	400	48		60.42			60.42			--	--	--
Mathematics 30	400	50		62.50			62.50			200	6	264.24
Mathematics 31	200	9		173.62			173.62			--	--	--
Biology 30	600	53		73.56			73.56			--	--	--
Chemistry 30	400	35		74.92			74.92			200	5	317.53
Physics 30	200	15		104.17			104.17			200	6	264.68
French 30	400	28		77.14			77.14			200	8	185.60
Shorthand 31	200	11		82.23			82.23			--	--	--
Typewriting 30	200	11		82.23			105.95			200	4	294.38
"Extra Curricular" †	--	74		--			0.59			--	13	0.91
Direct/Indirect Average Per Pupil Cost ††		74					424.86				13	827.27
Implementary Per Pupil Cost ††		74					500.59				13	590.72
Average Per Pupil Cost ††		74					925.45				13	1417.99

*Includes grades 10 to 12.

** Includes grades 11 and 12.

† Indirect cost, extra curricular sports, applicable if physical education not provided.

†† Based on the actual number of students in yearly attendance.

Grade 12. The most expensive course was Chemistry 30 at \$317.53 per pupil at Plamondon School. Relatively expensive courses also included Typewriting 30 (at \$299.31 per pupil, the second most expensive course), Physics 30, French 30, Mathematics 30, Mathematics 31, and English 30 reflecting primarily low enrollments. Least expensive of all courses was Social Studies 36 in J. A. Williams School at \$36.02 per pupil--seemingly due to low course time, relatively high enrollment, and possibly lower-than-usual costs of direct salary.

Division IV

Two schools, J. A. Williams and Plamondon, offered courses in Grades Ten, Eleven and Twelve. While teacher salaries were lower on the average than in other Divisions (Table 5), low enrollments coupled with large amounts of time seemed key factors in creating unusually high per pupil costs for the courses offered. For the three grade levels, Mathematics 22 (Grade Eleven, J. A. Williams School) at \$411.80 per pupil was the most expensive course. Least expensive of all courses was Reading 10 (Grade Ten, Plamondon School) at \$16.81 per pupil. No course was consistently high or low for all grades, since costs varied considerably by school and grade depending primarily upon enrollments to alter costs. Some courses in business or vocational areas, because of small enrollments, did, however, attain slightly higher costs.

Average per pupil costs were generally higher than in

other divisional levels. Grade Twelve in Plamondon School at \$1,417.99 was the highest average per pupil cost for the three grades, while \$925.45 per pupil in Grade Twelve in J. A. Williams School was the lowest per pupil cost. Tables 39, 43, and 44 in Appendix C have illustrated the Direct, Indirect, and Implementary costs attributed to the schools at this level.

INSTRUCTIONAL COSTS BY COURSES

IN THE GRADES AND DIVISIONS OF LAC LA BICHE

SCHOOL DIVISION NO. 51

Examination of courses and costs offered by the Lac La Biche School Division in 1969-1970 school year permitted an overview of costs in the Division in a specific grade.

Tables 20 to 35 inclusive have portrayed the direct enrolled pupil costs of all courses offered by Lac La Biche School Division for grades one to twelve and for Divisions I to IV. Each table has listed the courses offered in total by all the schools at that particular grade or level. Beside each course has been listed the total cost of that course for all schools in terms of direct expenditure (the prorated portion of teachers' salaries devoted to that course). The total number of pupils enrolled in that course has been indicated in the next column. The third column has indicated the enrolled pupil costs, a cost obtained by dividing the direct cost of the course by the number of enrolled pupils. To provide an indication of the cost to the Lac La Biche

School Division, a fourth column, "Direct Cost Per Pupil," has illustrated the cost as applied to all possible students in that level. Hence, where enrollments failed to equal the total number of enrolled students, the courses have been equalized in terms of direct costs on per pupil bases-- the result has been an attempt to indicate the outlay by the Division on each course for all students. The fifth column has incorporated indirect costs (refer to Tables 40, 41, 42, and 43 in Appendix C) with this direct cost per pupil. In the following section, per enrolled pupil costs were obtained from the third column of the tables, while per pupil costs will be based on the direct and indirect costs established in the fifth column.

At the base of each table has been included figures reflecting average costs on the basis of the enrolled pupils in that level (spaces not completed by figures have been considered as insignificant). Such figures have been included to denote the Division's expenditure at that level. The first line at the base of each table, entitled "Direct /Indirect Per Pupil Average Cost," has commenced with the total cost for all courses in terms of direct costs (teachers' salaries). The possible enrollment of that grade, or division, was listed next, and then was divided into the total cost to obtain the third figure, the average direct cost per pupil. The fourth figure, average direct/indirect per pupil cost, added the indirect costs per pupil to the previous figure. The second line of figures has stated the

average implementary cost per pupil, as extracted from Table 44 of Appendix C. The third line has declared the average per pupil cost, or, in effect, the Division's total cost per pupil for that specific level.

Grade One

Table 20 has indicated the courses and costs of Grade One in the Lac La Biche School Division. The most expensive course, in terms of direct cost, was Reading/Phonics at \$34,437.92, while the second most expensive course was Mathematics. Both figures represent a large amount of instructional time. In terms of per enrolled pupil costs, Reading/Phonics (\$126.61) and Creative English (\$113.37) ranked first and second respectively in terms of costs. While the latter course was low in direct cost terms, the low enrollment heightened the per enrolled pupil cost. Least expensive of all courses was Home Room Period at \$4.73 per enrolled pupil for a total cost (direct cost) of \$118.25. When all students in the Division were considered as taking every course, then the direct/indirect per pupil cost indicated that the most expensive course was Reading/Phonics at \$126.61 per pupil, while the least expensive course was Home Room Period at \$0.43 per pupil.

Each Grade One pupil cost the Division an average cost of \$613.45 per pupil.

Grade Two

Table 21 has indicated the costs and courses of Grade

TABLE 20

INSTRUCTION COSTS OF GRADE ONE STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	2,099.52	243	8.64	7.72	7.72
Supervised Study	441.00	28	15.75	1.62	1.62
Home Room Period	118.25	25	4.73	.43	.43
Special Supervision	--	--	--	--	--
Remedial Instruction	--	--	--	--	--
Language	3,181.84	248	12.83	11.70	11.70
Printing or Writing	3,364.00	232	14.50	12.37	12.37
Reading & Phonics	34,437.92	272	126.61	126.61	126.61
Library and/or storytime	118.80	24	4.95	.44	.44
Spelling	4,436.32	272	16.31	16.31	16.31
Creative English	566.85	5	113.37	2.08	2.08
French	1,498.15	19	78.85	5.51	5.51
Mathematics	13,450.28	272	49.45	49.45	49.45
Social Studies	3,788.25	272	13.93	13.93	13.93
Science	4,065.06	272	14.95	14.95	15.17
Health	3,048.98	272	11.21	11.21	11.21
Guidance	--	--	--	--	--
Music	2,901.60	248	11.70	10.67	10.67
Art	3,685.60	272	13.55	13.55	13.55
Physical Education	3,424.28	272	12.59	12.59	14.32
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	5,243.80	242	21.67	19.28	19.28
Direct, Direct/ Indirect Per Pupil Average Cost*	89,874.24	272	--	330.42	332.37
Implementary Per Pupil Cost*		272	--	--	281.08
Average Per Pupil Cost*		272	--	--	613.45

* A base of 272 students, the number of grade one students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs.

TABLE 21

INSTRUCTION COSTS OF GRADE TWO STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	2,532.71	233	10.87	10.25	10.25
Supervised Study	172.06	14	12.29	.70	.70
Home Room Period	--	--	--	--	--
Special Supervision	--	--	--	--	--
Remedial Instruction	--	--	--	--	--
Language	7,014.80	247	28.40	28.40	28.40
Printing or Writing	2,222.00	202	11.00	9.00	9.00
Reading & Phonics	26,498.16	247	107.28	107.28	107.28
Library and/or Storytime	--	--	--	--	--
Spelling	5,253.59	247	21.27	21.27	21.27
Creative English	598.89	10	59.89	2.42	2.42
French	1,153.76	16	72.11	4.67	4.67
Mathematics	13,779.84	247	55.79	55.79	55.79
Social Studies	4,246.35	247	17.20	17.20	17.20
Science	5,676.11	247	22.98	22.98	23.21
Health	3,255.31	247	13.18	13.18	13.18
Guidance	--	--	--	--	--
Music	2,813.33	221	12.73	11.39	11.39
Art	3,151.72	247	12.76	12.76	12.76
Physical Education	2,859.96	247	11.58	11.58	13.19
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	4,747.40	216	21.97	19.22	19.22
Direct, Direct/Indirect Per Pupil Average Cost*	85,978.23	247	--	348.09	349.93
Implementary Per Pupil Cost*		247	--	--	287.89
Average Per Pupil Cost*		247	--	--	637.82

* A base of 247 students, the number of grade two students in the Lac La Biche School Division, has been utilized in the calculation of per pupil costs.

Two students in the Division. In terms of direct costs, the most expensive course, primarily because of large amounts of instructional time, was Reading/Phonics at \$26,498.16, while the second most expensive course was Mathematics at \$13,779.84. Reading/Phonics at \$107.28 per enrolled pupil was the most expensive course on an enrolled pupil basis, while French, with its low enrollment, was the second most expensive course at \$72.11 per enrolled pupil. Least expensive of all courses was Supervised Study at \$172.06 in direct costs, but the larger enrollment in Opening Exercises reduced the enrolled pupil cost to \$10.87 per enrolled pupil making it least expensive in enrolled terms.

When the direct costs of the courses were divided equally by all students of Grade Two in the Division, the most expensive course (in direct/indirect terms) was Reading/Phonics at \$107.28 per pupil and the least expensive course was Supervised Study at \$0.70 per pupil.

Each Grade Two pupil cost the Division an average cost of \$637.82 per pupil.

Grade Three

The courses and costs of Grade Three students in the Division have been indicated in Table 22. In terms of direct costs, the most expensive course was Reading/Phonics at \$27,292.16, followed by Mathematics at \$13,762.17. In terms of enrolled pupil costs, Reading/Phonics at \$106.61 per enrolled pupil was the most expensive, while the second most expensive course, Mathematics, was \$53.76 per enrolled pupil.

TABLE 22

INSTRUCTIONAL COSTS OF GRADE THREE STUDENTS IN
IN LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	814.20	138	5.90	3.18	3.18
Supervised Study	263.84	34	7.76	1.03	1.03
Home Room Period	--	--	--	--	--
Special Supervision	321.78	186	1.73	1.26	1.26
Remedial Instruction	--	--	--	--	--
Language	7,854.70	229	34.30	30.68	30.68
Printing or Writing	3,037.50	243	12.50	11.87	11.87
Reading & Phonics	27,292.16	256	106.61	106.61	106.61
Library and/or Storytime	695.79	81	8.59	2.72	2.72
Spelling	5,504.00	256	21.50	21.50	21.50
Creative English	598.92	12	49.91	2.34	2.34
French	576.90	15	38.46	2.25	2.25
Mathematics	13,762.17	256	53.76	53.76	53.76
Social Studies	7,504.54	256	29.31	29.31	29.31
Science	6,296.37	256	24.60	24.60	24.67
Health	2,577.28	229	11.25	10.07	10.07
Guidance	--	--	--	--	--
Music	2,235.04	229	9.76	8.73	8.73
Art	3,405.23	229	14.87	13.30	13.30
Physical Education	3,133.17	256	12.24	12.24	12.41
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	2,360.67	222	10.63	9.22	9.22
Direct and Direct/ Indirect Per Pupil Average Cost*	88,235.52	256	--	344.67	344.91
Implementary Per Pupil Cost*		256	--	--	280.68
Average Per Pupil Cost*		256	--	--	625.59

*A base of 256 students, the number of grade three students in the Lac La Biche School Division, has been utilized in the calculation of per pupil costs.

Supervised Study at \$263.84 was the least expensive of direct costs, but the higher enrollment of Special Supervision made that course, at \$1.73 per enrolled pupil, the least expensive enrolled pupil cost.

Direct/Indirect pupil costs revealed Reading/Phonics at \$106.61 per pupil as the most expensive course, while the least expensive course was Supervised Study at \$1.03 per pupil.

Each Grade Three pupil cost the Division an average of \$625.59 per pupil.

Division I

All courses of Grades One, Two, and Three were compiled into Table 23 to provide an indication of Division I costs in the Lac La Biche School Division. In regard to Direct Costs, Reading/Phonics accounted for \$88,228.24 of the total \$264,087.99 expended in teacher salaries reflecting the heavy expenditure of time on that course. Home Room Period with minimal total time was least expensive since only \$118.25 in direct costs was utilized. In terms of enrolled costs, Reading/Phonics at \$88.04 per enrolled pupil was most expensive, while Creative English, with a small enrollment, was second most expensive at \$65.36 per enrolled pupil. Least expensive of all, due primarily to large enrollment, was Special Supervision at \$1.73 per enrolled pupil.

Direct/Indirect Pupil Costs revealed that Reading/Phonics at \$88.04 per pupil was most expensive, Mathematics at \$52.89 per pupil was second most expensive, and Home Room

TABLE 23

INSTRUCTION COSTS OF DIVISION I STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	5,446.43	614	8.87	7.03	7.03
Supervised Study	876.90	76	11.54	1.13	1.13
Home Room Period	118.25	25	4.73	.15	.15
Special Supervision	321.78	186	1.73	.42	.42
Remedial Instruction	--	--	--	--	--
Language	18,051.34	724	24.93	23.29	23.29
Printing or Writing	8,623.50	677	12.74	11.13	11.13
Reading & Phonics	88,228.24	775	88.04	88.04	88.04
Library and/or Storytime	814.59	105	7.76	1.05	1.05
Spelling	15,193.91	775	19.60	19.60	19.60
Creative English	1,764.66	27	65.36	2.28	2.28
French	3,228.81	50	64.58	4.17	4.17
Mathematics	40,992.29	775	52.89	52.89	52.89
Social Studies	15,539.14	775	20.05	20.05	20.05
Science	16,037.54	961	16.69	20.69	20.87
Health	8,881.57	748	11.87	11.46	11.46
Guidance	--	--	--	--	--
Music	7,949.97	698	11.39	10.26	10.26
Art	10,242.55	748	13.22	13.22	13.22
Physical Education	9,417.40	775	12.15	12.15	13.32
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	12,351.87	680	18.16	15.94	15.94
Direct and Direct/ Indirect Per Pupil Average Cost*	264,087.99	775	--	340.76	342.11
Implementary Per Pupil Cost*		775	--	--	283.11
Average Per Pupil Cost*		775	--	--	625.22

*A based of 775 students, the number of Division I students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs.

Period at \$0.15 per pupil was least expensive. All costs were directly related to the extent of time and scope of enrollment attributed to them.

At \$613.45 per pupil, Grade One had the lowest average per pupil cost, though Division I had an average per pupil cost of \$625.22 per pupil.

Grade Four

In Table 24 the costs and courses of Grade Four students in the Lac La Biche School Division have been illustrated. Reading/Phonics at \$19,005.34 in direct costs was the most expensive course while Supervised Study at \$172.00 in direct costs was the least expensive. Due primarily to the large amount of time, Reading/Phonics at \$88.81 per enrolled pupil was the most expensive course while Creative English, with a small enrollment, was second most expensive at \$64.87 per enrolled pupil. Least expensive was the large enrollment course of Special Supervision at \$1.73 per enrolled pupil.

Equalizing the courses by dividing the direct cost by the total possible enrollment revealed that the most expensive course was Reading/Phonics at \$88.81 per pupil, while Supervised Study at \$0.80 per pupil was least expensive.

Each Grade Four student cost the Division an average of \$624.54 per pupil.

Grade Five

The courses and costs of Grade Five students have been

TABLE 24

INSTRUCTIONAL COSTS OF GRADE FOUR STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	774.63	151	5.13	3.62	3.62
Supervised Study	172.00	5	34.40	.80	.80
Home Room Period	--	--	--	--	--
Special Supervision	292.37	169	1.73	1.37	1.37
Remedial Instruction	--	--	--	--	--
Language	8,508.64	214	39.76	39.76	39.76
Printing or Writing	1,896.02	203	9.34	8.86	8.86
Reading & Phonics	19,005.34	214	88.81	88.81	88.81
Library and/or Storytime	351.96	21	16.76	1.64	1.64
Spelling	4,752.94	214	22.21	22.21	22.21
Creative English	389.22	6	64.87	1.82	1.82
French	579.90	15	38.66	2.71	2.71
Mathematics	11,456.68	214	53.54	53.54	53.54
Social Studies	8,296.89	214	38.77	38.77	38.77
Science	5,855.84	383	15.29	27.36	27.42
Health	2,141.96	206	10.40	10.01	10.01
Guidance	--	--	--	--	--
Music	1,735.07	193	8.99	8.11	8.11
Art	3,026.73	203	14.91	14.14	14.14
Physical Education	2,594.77	214	12.13	12.13	12.27
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	2,130.06	195	10.92	9.95	9.95
Direct and Direct/Indirect Per Pupil Average Cost*	73,960.64	214	--	345.61	345.81
Implementary Per Pupil Cost*		214	--	--	278.73
Average Per Pupil Cost*		214	--	--	624.54

* A base of 214 students, the number of grade four students in the Lac La Biche School Division, has been utilized in the calculation of the per pupil costs.

portrayed in Table 25. At \$12,160.60 Reading/Phonics was the most expensive course, followed by Mathematics at \$8,705.53 in direct costs. Least expensive of the direct costs was Special Supervision at \$262.96. Most expensive in enrolled pupil costs was Creative English at \$97.30 per enrolled pupil reflecting the low enrollment in the course. While Reading/Phonics at \$59.32 per enrolled pupil was second most expensive, the high enrollment and comparatively small time made Special Supervision the least expensive course at \$1.73 per enrolled pupil.

In terms of direct/indirect pupil costs, the direct cost divided by the possible enrollment plus the indirect costs, the most expensive course was Reading/Phonics at \$59.32 per pupil while Special Supervision at \$1.28 per pupil was least expensive.

Each Grade Five student cost the Division an average of \$555.21 per pupil when all costs were considered.

Grade Six

Table 26 has illustrated the courses and costs of Grade Six students in the Division. In terms of direct cost the most expensive course was Reading/Phonics at \$15,881.79 followed by Mathematics at \$12,832.90. Least expensive was Opening Exercises at \$133.10. Reduced to enrolled pupil costs, the most expensive course was Home Economics at \$164.63 per enrolled pupil, while Industrial Arts at \$140.86 per enrolled pupil was second most expensive--a reflection of the low enrollment in conjunction with a relatively high

TABLE 25

INSTRUCTIONAL COSTS OF GRADE FIVE STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	408.24	108	3.78	1.99	1.99
Supervised Study	348.48	12	29.04	1.70	1.70
Home Room Period	--	--	--	--	--
Special Supervision	262.96	152	1.73	1.28	1.28
Remedial Instruction	--	--	--	--	--
Language	6,785.50	205	33.10	33.10	33.10
Printing or Writing	1,409.80	190	7.42	6.88	6.88
Reading & Phonics	12,160.60	205	59.32	59.32	59.32
Library and/or Storytime	770.77	91	8.47	3.76	3.76
Spelling	3,044.25	205	14.85	14.85	14.85
Creative English	389.20	4	97.30	1.90	1.90
French	690.56	16	43.16	3.37	3.37
Mathematics	8,705.53	205	42.47	42.47	42.47
Social Studies	6,203.16	185	33.53	30.26	30.26
Science	5,370.65	357	15.04	26.20	26.27
Health	1,417.48	179	7.92	6.91	6.91
Guidance	--	--	--	--	--
Music	1,396.85	307	4.55	6.81	6.81
Art	1,946.50	170	11.45	9.50	9.50
Physical Education	2,429.97	205	11.85	11.85	11.99
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Religious Instruction	2,320.24	184	12.61	11.32	11.32
Direct and Direct/ Indirect Per Pupil Average Cost*	56,061.35	205	--	273.47	273.68
Implementary Per Pupil Cost*		205	--	--	281.53
Average Per Pupil Cost*		205	--	--	555.21

* A base of 205 students, the number of grade five students in the Lac La Biche School Division, has been utilized in the calculation of the per pupil costs.

TABLE 26

INSTRUCTIONAL COSTS OF GRADE SIX STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	133.10	22	6.05	.63	.63
Supervised Study	745.82	50	14.92	3.55	3.55
Home Room Period	--	--	--	--	--
Special Supervision	254.31	147	1.73	1.21	1.21
Remedial Instruction	1,789.30	29	61.70	8.52	8.52
Language	9,753.00	210	46.44	46.44	46.44
Printing or Writing	1,346.86	171	7.88	6.41	6.41
Reading & Phonics	15,881.79	210	75.63	75.63	75.63
Library and/or Storytime	561.66	69	8.14	2.67	2.67
Spelling	3,877.08	210	18.46	18.46	18.46
Creative English	368.36	4	92.09	1.75	1.75
French	690.48	18	38.36	3.29	3.29
Mathematics	12,832.90	228	56.28	61.11	61.11
Social Studies	7,711.96	184	41.91	36.72	36.72
Science	6,382.79	353	18.08	30.39	30.46
Health	1,406.02	154	9.13	6.70	6.70
Guidance	261.80	34	7.70	1.25	1.25
Music	1,346.86	171	7.88	6.41	6.41
Art	2,517.12	184	13.68	11.99	11.99
Physical Education	2,785.47	210	13.26	13.26	13.41
Home Economics	1,317.00	8	164.63	6.27	6.27
Industrial Arts	1,972.00	14	140.86	9.39	9.39
Religious Instruction	2,362.68	185	12.77	11.25	11.25
Direct and Direct/Indirect Per Pupil Average Cost*	76,293.00	210	--	363.30	363.52
Implementary Per Pupil Cost*		210	--	--	290.03
Average Per Pupil Cost*		210	--	--	653.55

* A base of 210 students, the number of grade six students in the Lac La Biche School Division, has been utilized in the calculation of the per pupil costs.

expenditure of time and teacher qualification. The least expensive course was Special Supervision at \$1.73 per enrolled pupil.

When direct costs were equalized by the total number of Grade Six students, the most expensive course was Reading/Phonics at \$75.63 per pupil in terms of direct/indirect pupil costs. The least expensive course was Opening Exercises at \$0.63 per pupil.

Each Grade Six student cost the Division an average of \$653.55 per pupil.

Division II

Grades Four, Five and Six have been compiled into Table 27 to illustrate the courses and costs of Division II in Lac La Biche School Division No. 51. In terms of direct costs, the most costly course was Reading/Phonics at \$47,047.73 out of a total direct expenditure (for all three grades) of \$206,314.99. Least costly was Guidance at \$261.80. Both costs have reflected the extremes in time expended at this level. In enrolled pupil costs, the most expensive course was Home Economics at \$164.63 per enrolled pupil, while Special Supervision at \$1.73 per enrolled pupil was least expensive.

By dividing the direct costs of courses by the total number of students in this divisional level, and adding the indirect costs on the same basis, the most expensive course was Reading/Phonics at \$74.80 per pupil, while the least expensive course was Guidance at \$0.42 per pupil.

TABLE 27

INSTRUCTION COSTS OF DIVISION II STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	1,315.97	281	4.68	2.09	2.09
Supervised Study	1,266.30	67	18.90	2.01	2.01
Home Room Period	--	--	--	--	--
Special Supervision	809.64	468	1.73	1.29	1.29
Remedial Instruction	1,789.30	29	61.70	2.84	2.84
Language	25,047.14	629	39.82	39.82	39.82
Printing or Writing	4,652.68	564	8.24	7.40	7.40
Reading & Phonics	47,047.73	629	74.80	74.80	74.80
Library and/or Storytime	1,684.39	181	8.91	2.68	2.68
Spelling	11,674.27	629	18.56	18.56	18.56
Creative English	1,146.78	14	81.91	1.82	1.82
French	1,960.94	49	40.02	3.12	3.12
Mathematics	32,995.11	647	51.00	52.46	52.46
Social Studies	22,212.00	583	38.10	35.31	35.31
Science	17,609.28	1093	16.11	28.00	28.07
Health	4,965.46	539	9.21	7.89	7.89
Guidance	261.80	34	7.70	.42	.42
Music	4,478.78	671	6.67	7.12	7.12
Art	7,490.35	557	13.45	11.91	11.91
Physical Education	7,810.21	629	12.42	12.42	12.56
Home Economics	1,317.00	8	164.63	2.09	2.09
Industrial Arts	1,972.00	14	140.86	3.14	3.14
Religious Instruction	6,812.98	564	12.08	10.83	10.83
Direct and Direct/ Indirect Per Pupil					
Average Cost*	206,314.99	629	--	328.00	328.21
Impelementary Per Pupil Cost*		629	--	--	283.41
Average Per Pupil Cost*		629	--	--	611.62

* A base of 629 students, the number of Division II students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs.

At \$555.21 per pupil Grade Five had the lowest average per pupil cost while the Division II average was \$611.62 per pupil. This lower cost could be explained, partially by the lower than average salaries of the teaching staff at this level in the high enrollment V. M. Welsh School (refer to Table 5).

Grade Seven

Table 28 has illustrated the courses and costs of Grade Seven students in the Lac La Biche School Division. The most expensive course was Mathematics at \$7,841.51 in direct costs. Second most expensive in direct costs was Language at \$7,584.32, while the least expensive course was Opening Exercises at \$51.73. The extremes were primarily due to allotment of times to the respective courses. In enrolled costs, the most expensive course was the low enrollment Typing at \$65.42 per enrolled pupil, while Special Supervision at \$3.23 per enrolled pupil was least expensive.

In terms of direct/indirect pupil costs, the most expensive course was Mathematics at \$45.33 per pupil while Opening Exercises at \$0.30 per pupil was least expensive.

Each Grade Seven student cost the Division an average of \$722.41 per pupil when all costs were considered.

Grade Eight

Table 29 has illustrated the courses and costs of Grade Eight students in the Division. In terms of direct

TABLE 28

INSTRUCTION COSTS OF GRADE SEVEN STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	51.73	7	7.39	.30	.30
Supervised Study	473.55	7	67.65	2.74	2.74
Special Supervision	439.28	136	3.23	2.54	2.54
Religious Instruct.	485.46	23	21.11	2.81	2.81
Language	7,584.32	173	43.84	43.84	43.84
Reading	2,964.00	150	19.76	17.13	17.13
Library	266.56	7	38.08	1.54	1.54
Spelling	258.58	7	36.94	1.49	1.49
Literature	3,343.34	143	23.38	19.33	19.33
Mathematics	7,841.51	173	45.33	45.33	45.33
Vocational Math.	148.92	4	37.23	.86	.86
Social Studies	6,608.60	173	38.20	38.20	38.20
Sociology	3,477.52	136	25.57	20.10	20.10
Geography	241.36	7	34.48	1.40	1.40
Science	4,887.25	173	28.25	28.25	31.36
Biology	--	--	--	--	--
Agriculture	529.08	10	52.91	3.06	3.06
Health	2,284.50	150	15.23	13.21	13.21
Guidance	2,640.99	159	16.61	15.27	15.27
Music	1,339.00	50	26.78	7.74	7.74
Art	3,307.50	150	22.05	19.12	19.12
Drama	622.38	23	27.06	3.60	3.60
French	343.56	19	18.08	1.99	1.99
Typing	196.26	3	65.42	1.13	1.13
Physical Educ.	2,822.86	173	16.32	16.32	17.43
Home Economics	2,113.76	68	31.08	12.22	12.49
Industrial Arts	2,470.95	68	36.34	14.28	39.98
Direct and Direct/ Indirect Per Pupil Average Cost*	57,742.82	173	--	333.77	363.98
Implementary Per Pupil Cost*		173	--	--	358.43
Average Per Pupil Cost*		173	--	--	722.41

* A base of 173 students, the number of grade seven students in the Lac La Biche school Division, has been utilized in calculation of the per pupil costs.

TABLE 29

INSTRUCTIONAL COSTS OF GRADE EIGHT STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	51.72	6	8.62	.33	.33
Supervised Study	899.43	28	32.12	5.73	5.73
Special Supervision	397.29	123	3.23	2.53	2.53
Religious Instruct.	485.46	21	23.12	3.09	3.09
Language	7,531.29	157	47.97	47.97	47.97
Reading	3,096.72	136	22.77	19.72	19.72
Library	536.80	22	24.40	3.42	3.42
Spelling	258.60	6	43.10	1.65	1.65
Literature	3,058.59	129	23.71	19.48	19.48
Mathematics	8,032.16	157	51.16	51.16	51.16
Vocational Math.	37.23	1	37.23	.24	.24
Social Studies	6,760.42	157	43.06	43.06	43.06
Sociology	--	--	--	--	--
Geography	241.38	6	40.23	1.54	1.54
Science	5,348.99	157	34.07	34.07	37.11
Biology	2,247.21	123	18.27	14.31	14.31
Agriculture	344.82	6	57.47	2.20	2.20
Health	2,033.20	136	14.95	12.95	12.95
Guidance	2,640.48	144	18.34	16.82	16.82
Music	4,271.40	140	30.51	27.21	27.21
Art	3,315.68	136	24.38	21.12	21.12
Drama	622.44	21	29.64	3.96	3.96
French	390.54	19	20.55	2.49	2.49
Typing	196.26	3	65.42	1.25	1.25
Physical Educ.	3,084.15	157	19.64	19.64	20.73
Home Economics	--	--	--	--	--
Industrial Arts	--	--	--	--	--
Direct and Direct/ Indirect Per Pupil Average Cost*	55,882.26	157	--	355.93	360.06
Implemetary Per Pupil Cost*		157	--	--	369.83
Average Per Pupil Cost*		157	--	--	729.89

* A base of 157 students, the number of grade eight students in the Lac La Biche School Division has been utilized in calculation of the per pupil costs.

costs Mathematics at \$8,032.16 was most expensive while Vocational Mathematics at \$37.23 was least expensive. The most expensive course by enrolled costs was Agriculture at \$57.47 per enrolled pupil while Special Supervision at \$3.23 per enrolled pupil was the least expensive.

For direct/indirect costs, the most expensive course was Mathematics at \$51.16 per pupil, second most expensive was Language at \$47.97 per pupil, and Vocational Mathematics at \$0.24 per pupil was the least expensive course.

Each Grade Eight pupil cost the Division an average cost of \$729.89 per pupil for all costs.

Grade Nine

Table 30 has illustrated the courses and costs of Grade Nine students in the Division. The most expensive course was Mathematics at \$7,931.54 in direct costs; the least expensive course was Typing at \$196.26 in direct costs. In terms of enrolled pupil costs, the most expensive course was Typing at \$65.42 per enrolled pupil (a reflection of the low enrollment) while the least expensive course was Special Supervision at \$3.23 per enrolled pupil.

Equalizing direct costs, and adding indirect costs on the same Grade Nine pupil basis, revealed Mathematics at \$50.84 per pupil as the most expensive course. The least expensive course was Typing at \$1.26 per pupil.

Each Grade Nine student cost the Division an average of \$787.31 per pupil for all costs.

TABLE 30

INSTRUCTIONAL COSTS OF GRADE NINE STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	--	--	--	--	--
Supervised Study	455.26	13	35.02	2.92	2.92
Special Supervision	377.91	117	3.23	2.42	2.42
Religious Instruct.	742.40	26	28.55	4.76	4.76
Language	7,453.68	156	47.78	47.78	47.78
Reading	7,014.00	130	20.78	44.96	44.96
Library	485.42	13	37.34	3.11	3.11
Spelling	--	--	--	--	--
Literature	3,270.15	117	27.95	20.96	20.96
Mathematics	7,931.54	156	50.84	50.84	50.84
Vocational Math.	223.38	6	37.23	1.43	1.43
Social Studies	5,926.39	156	37.99	37.99	37.99
Sociology	--	--	--	--	--
Geography	--	--	--	--	--
Science	5,669.98	156	36.35	36.35	38.96
Biology	--	--	--	--	--
Agriculture	429.94	7	61.42	2.76	2.76
Health	2,398.50	130	18.45	15.38	15.38
Guidance	2,543.40	156	16.30	16.30	16.30
Music	4,140.81	139	29.79	26.54	26.54
Art	881.66	26	33.91	5.65	5.65
Drama	447.98	13	34.46	2.87	2.87
French	3,217.22	134	24.01	20.62	20.62
Typing	196.26	3	65.42	1.26	1.26
Physical Educ.	2,937.61	156	18.83	18.83	19.78
Home Economics	2,113.76	68	31.08	13.55	13.85
Industrial Arts	2,470.95	49	50.43	15.84	36.38
Direct and Direct/ Indirect Per Pupil Average Cost*	61,328.20	156	--	393.12	417.52
Implementary Per Pupil Cost*		156	--	--	369.79
Average Per Pupil Cost*		156	--	--	787.31

* A base of 156 students, the number of grade nine students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs.

Division III

Compilation of Grades Seven, Eight, and Nine resulted in Table 31 illustrating the courses and costs of Division III in the Lac La Biche School Division. The highest expenditure in direct costs was Mathematics at \$23,805.21 out of a total direct cost of \$174,953.26 for the three grades. Lowest in expenditure was Opening Exercises at \$103.45 in direct costs. Consideration of enrolled pupil costs revealed that Typing at \$65.42 per enrolled pupil was the most expensive course, Agriculture at \$56.69 per enrolled pupil was the second most expensive, and Special Supervision at \$3.23 per enrolled pupil was least expensive. The higher costs were attributed to lower enrollments, while the lowest cost was attributed to the high enrollment and small amount of instructional time.

In direct/indirect terms, the most expensive course was Mathematics at \$48.98 per pupil, the second most expensive course was Language at \$46.44 per pupil, and Opening Exercises at \$0.21 per pupil was the least expensive course.

While Grade Seven average per pupil costs were least expensive at \$722.41 per pupil, each Division III student cost the Lac La Biche School Division an average of \$745.33 per pupil when all costs were considered.

Grade Ten

The courses and costs offered in Grade Ten in the Lac La Biche School Division have been illustrated in Table 32 with semestered courses adjusted to equal full-year courses. Most expensive in terms of direct costs was Social Studies 10

TABLE 31

INSTRUCTIONAL COSTS OF DIVISION III STUDENTS IN
LAC LA BICHE SCHOOL DIVISION NO. 51

Course	Direct Cost	Pupils Enrol.	Dir. Cost Per Enrol. Pupil	Dir. Cost Per Pupil*	Dir./Ind. Pupil Cost*
Opening Exercises	103.45	13	7.96	.21	.21
Supervised Study	1,828.24	48	38.09	3.76	3.76
Special Supervision	1,214.48	376	3.23	2.50	2.50
Religious Instruct.	1,713.32	70	24.48	3.53	3.53
Language	22,569.29	486	46.44	46.44	46.44
Reading	13,074.72	416	31.43	26.90	26.90
Library	1,288.78	42	30.69	2.65	2.65
Spelling	517.18	13	39.78	1.06	1.06
Literature	9,672.08	389	24.86	19.90	19.90
Mathematics	23,805.21	486	48.98	48.98	48.98
Vocational Math.	409.53	11	37.23	.84	.84
Social Studies	19,295.41	486	39.70	39.70	39.70
Sociology	3,477.52	136	25.57	7.16	7.16
Geography	482.74	13	37.15	.99	.99
Science	15,906.22	486	32.73	32.73	35.66
Biology	2,247.21	123	18.27	4.62	4.62
Agriculture	1,303.84	23	56.69	2.68	2.68
Health	6,716.20	416	16.14	13.82	13.82
Guidance	7,824.87	459	17.05	16.10	16.10
Music	9,751.21	329	29.64	20.06	20.06
Art	7,504.84	312	24.05	15.44	15.44
Drama	1,692.80	57	29.70	3.48	3.48
French	3,951.32	172	22.97	8.13	8.13
Typing	588.75	9	65.42	1.21	1.21
Physical Educ.	8,844.63	486	18.20	18.20	19.25
Home Economics	4,227.52	136	31.08	8.70	8.88
Industrial Arts	4,941.90	117	42.24	10.17	25.91
Direct and Direct/ Indirect Per Pupil Average Cost*	174,953.26	486	--	359.99	379.89
Implemetary Per Pupil Cost*		486	--	--	365.44
Average Per Pupil Cost*		486	--	--	745.33

* A base of 486 students, the number of Division III students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs.

TABLE 32

INSTRUCTIONAL COSTS FOR GRADE TEN STUDENTS IN
THE LAC LA BICHE SCHOOL DIVISION

Course	Direct Cost*	Pupil Enrol.*	Dir. Cost Per Enrol. Pupil*	Dir. Cost Per Pupil**	Dir./Ind. Pupil Cost**
Supervision	2,687.60	40	67.19	22.58	22.58
Religious Instruct.	742.40	21	35.35	6.24	6.24
English 10	6,229.08	156	39.93	52.35	52.35
Literature 11	651.87	9	72.43	5.48	5.48
Reading 10	2,810.24	64	43.91	23.62	23.62
Social Studies 10	9,029.16	126	71.66	75.88	75.88
Mathematics 10	2,546.28	44	57.87	21.40	21.40
Mathematics 11	2,135.10	30	71.17	17.94	17.94
Mathematics 12	1,647.18	9	183.02	13.84	13.84
Mathematics(Remedial)	2,824.38	71	39.78	23.73	23.73
Biology 10	1,675.20	60	27.92	14.08	14.10
Chemistry 10	3,285.12	64	51.33	27.61	27.63
Physics 10	1,623.36	19	85.44	13.64	13.66
Science 11	5,187.42	63	82.34	43.59	43.61
French 10	2,902.32	62	46.81	24.39	24.39
Music 10	865.50	10	86.55	7.27	7.27
Music 11	865.41	13	66.57	7.27	7.27
Physical Educ. 10	8,633.30	145	59.54	72.55	73.20
Bookkeeping 10	3,294.50	25	131.78	27.68	50.72
Typewriting 10	6,189.22	222	27.88	52.01	75.05
Fabrics & Dress 10	2,809.50	30	93.65	23.61	23.61
Foods & Nutrition 10	2,621.92	16	163.87	22.03	22.03
Home Economics 10	2,629.20	28	93.90	22.09	22.09
Ind. Arts General 10	5,107.11	43	118.77	42.92	42.92
Ind. Arts Elect. 10	1,726.40	26	66.40	14.51	14.51
Ind. Arts Power Mech. 10	4,550.18	41	110.98	38.24	38.24
Direct and Direct/ Indirect Average Per Pupil Cost**	85,268.95	119	--	716.55	763.35
Implementary Per Pupil Cost**		119	--	--	471.97
Average Per Pupil Cost**		119	--	--	1235.32

* Includes both semesters.

** A base of 119 students, the estimated average number of grade ten students in the Lac La Biche School Division, has been utilized in the calculation of the per pupil costs for the school year.

at \$9,029.16 while Physical Education 10 at \$8,633.30 was second most expensive. Least expensive was Literature 11 at \$651.87. The two higher costs seemed mainly a result of a large amount of instructional time apparently necessitated by large enrollments, while the lowest cost reflected a smaller demand and consequently a small amount of instructional time. Examination of enrolled costs revealed Mathematics 12 as the most expensive course at \$183.02 per enrolled pupil and Foods and Nutrition 10 at \$163.87 per enrolled pupil as second most expensive, reflecting the low enrollments of the courses. The least expensive course, due mainly to a large enrollment, was Typewriting 10 at \$27.88 per enrolled pupil.

Direct/indirect pupil costs, obtained by dividing direct costs by all Grade Ten students in the Division and adding any indirect costs, revealed that the most expensive course was Social Studies 10 at \$75.88 per pupil while Literature 11 at \$5.48 per pupil was least expensive. Such costs indicate the extremes in instructional times with teacher salary differences occupying a minor role in the costs.

When all costs were considered, the Division expended an average cost of \$1,235.32 per pupil for each Grade Ten student.

Grade Eleven

Table 33 has indicated the costs and courses of Grade Eleven students in the Division with semestered courses

TABLE 33

INSTRUCTIONAL COSTS FOR GRADE ELEVEN STUDENTS IN
THE LAC LA BICHE SCHOOL DIVISION

Course	Direct Cost*	Pupil Enrol.*	Dir. Cost Per Enrol. Pupil*	Dir. Cost Per Pupil**	Dir./Ind. Cost Per Pupil**
Supervision	3,290.98	56	58.77	33.93	33.93
English 20	2,710.80	60	45.18	27.95	27.95
English 23	3,045.96	36	84.61	31.40	31.40
Language 22	1,450.08	19	76.32	14.95	14.95
Literature 21	2,581.32	49	52.68	26.61	26.61
Social Studies 20	2,513.84	67	37.52	25.92	25.92
Psychology 20	738.10	22	33.55	7.61	7.61
Sociology 20	2,338.23	41	57.03	24.11	24.11
Mathematics 20	4,677.40	52	89.95	48.22	48.22
Mathematics 21	1,647.18	18	91.51	16.98	16.98
Mathematics 22	1,647.20	4	411.80	16.98	16.98
Biology 20	1,112.59	31	35.89	11.47	11.49
Chemistry 20	2,179.52	49	44.48	22.47	22.49
Physics 20	1,623.36	32	50.73	16.74	16.76
French 20	3,037.15	50	60.74	31.31	31.31
Law 20	904.59	19	47.61	9.33	11.98
Physical Educ. 20	2,703.96	31	87.22	27.88	28.53
Clerical Practice 20	904.53	11	82.23	9.33	11.98
Data Processing 22	1,647.11	19	86.69	16.98	19.63
Typewriting 20	1,493.30	26	57.43	15.39	18.04
Fabrics & Dress 20	1,404.75	5	280.95	14.48	14.48
Home Economics 21	1,404.72	12	117.06	14.48	14.48
Ind. Arts General 20	1,726.34	30	57.54	17.80	17.80
Direct and Direct/ Indirect Average Per Pupil Costs**	46,783.01	97	--	482.32	493.64
Implemetary Per Pupil Cost**		97	--	--	484.07
Average Per Pupil Cost**		97	--	--	977.71

* Includes both semesters.

** A base of 97 students, the estimated average number of grade eleven students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs for the school year.

adjusted to equal full-year courses. Mathematics 20 at \$4,677.40 and Supervision (supervised study) at \$3,290.98, both reflecting comparatively large instructional times, were the most expensive and second most expensive courses respectively in terms of direct costs. Reflecting the least amount of instructional time, Psychology 20 at \$738.10 was least expensive of the direct costs. In terms of enrolled costs, Mathematics 22 at \$411.80 per enrolled pupil was the most expensive course while Fabrics and Dress 20 at \$280.95 per enrolled pupil was second most expensive. Such costs appeared higher than others due mainly to the low enrollments. Low instructional time and "average" enrollment assisted in creating Psychology 20 as the least expensive course at \$33.55 per enrolled pupil.

Equalizing enrollments and adding indirect costs where applicable created pupil costs mainly reflecting extremes in instructional time. The most expensive course was Mathematics 20 at \$48.22 per pupil while Psychology 20 at \$7.61 per pupil was least expensive.

With all costs considered, each Grade Eleven student cost the Division an average cost of \$977.71 per pupil.

Grade Twelve

Table 34 has illustrated the courses and costs of Grade Twelve students in the Lac La Biche School Division. Courses offered on a semester basis have been adjusted to afford a view of all courses on a full-year basis. The direct costs revealed that Mathematics 30 at \$4,710.72 was

TABLE 34

INSTRUCTIONAL COSTS FOR GRADE TWELVE STUDENTS IN
THE LAC LA BICHE SCHOOL DIVISION

Course	Direct Cost*	Pupil Enrol.*	Dir. Cost Per Enrol. Pupil*	Dir. Cost Per Pupil**	Dir./Ind. Cost Per Pupil**
Supervision	3,290.98	56	58.77	33.93	34.57
English 30	4,031.55	51	79.05	46.34	46.34
English 33	2,581.48	44	58.67	29.67	29.67
Social Studies 30	3,777.28	52	72.64	43.42	43.42
Social Studies 36	1,080.60	30	36.02	12.42	12.42
Economics 30	2,900.16	48	60.42	33.34	33.34
Mathematics 30	4,710.72	56	84.12	54.15	54.15
Mathematics 31	1,562.58	9	173.62	17.96	17.96
Biology 30	3,898.68	53	73.56	44.81	44.83
Chemistry 30	4,207.60	40	105.19	48.36	48.38
Physics 30	3,148.11	21	149.91	36.19	36.21
French 30	3,644.64	36	101.24	41.89	41.89
Shorthand 31	904.53	11	82.23	10.40	12.01
Typewriting 30	2,082.00	15	138.80	23.93	25.54
Direct and Direct/ Indirect Average Per Pupil Costs**	41,820.91	87	--	476.81	480.04
Implemetary Per Pupil Cost**		87	--	--	514.06
Average Per Pupil Cost**		87	--	--	994.10

* Includes both semesters.

** A base of 87 students, the estimated average number of grade twelve students in the Lac La Biche School Division, has been utilized in calculation of the per pupil costs for the school year.

the most expensive course while Shorthand 31 at \$904.53 was the least expensive course. The differences were due, primarily, to the larger and smaller amounts of instructional time respectively. Inclusion of enrollments revealed Mathematics 31 (low enrollment) at \$173.62 per enrolled pupil was the most expensive course while Social Studies 36 (lower instructional time and slightly above-average enrollment) at \$36.02 per enrolled pupil was the least expensive course.

With indirect costs included and enrollment equalized by using the total number of Grade Twelve students in the Division, the most expensive course was Mathematics 30 at \$54.15 per pupil while Shorthand 31 at \$12.01 per pupil was the least expensive course. Differences primarily were due to greater or lesser amounts of instructional time with a minor influence of teacher salary variations.

Each Grade Twelve student cost the Division an average cost of \$994.10 per pupil when all costs were considered.

Division IV

With adjustment of semestered courses to equate them with full-year courses, and inclusion of all Grade Ten, Eleven, and Twelve students, Table 35 has illustrated the courses and costs in Division IV in the Lac La Biche School Division. Because few courses had no equivalent course at another grade (as was usually the case in the three previous divisional levels), Table 35 listed the courses individually and by curriculum clusters (courses in a related field of knowledge) with bracketed figures indicating a sub-total for that cluster.

TABLE 35

INSTRUCTIONAL COSTS FOR DIVISION IV STUDENTS IN
THE LAC LA BICHE SCHOOL DIVISION

Course	Direct Cost*	Pupil Enrol.*	Dir. Cost Per Enrol. Pupil*	Dir. Cost Per Pupil**	Dir./Ind. Cost Per Pupil**
Supervised Study	9,269.56	152	63.35	30.59	30.59
Religious Instruction	742.40	21	35.35	2.45	2.45
Language Arts	(26,093.92)	(488)	(53.47)	(86.12)	(86.12)
English 10-20-30	12,971.43	267	48.58	42.81	42.81
English 23-33	5,627.44	80	70.34	18.57	18.57
Language 22	1,450.08	19	76.32	4.79	4.79
Literature 11-21	3,233.19	58	55.74	10.67	10.67
Reading 10	2,810.24	64	43.91	9.27	9.27
Social Studies	(22,377.51)	(386)	(57.97)	(73.85)	(73.85)
Social Studies 10-20-30	15,320.28	245	62.53	50.56	50.56
Social Studies 36	1,080.60	30	36.02	3.57	3.57
Psychology 20	738.10	22	33.55	2.44	2.44
Sociology 20	2,338.23	41	57.03	7.72	7.72
Economics 30	2,900.16	48	60.42	9.57	9.57
Mathematics	(23,398.49)	(293)	(79.86)	(77.22)	(77.22)
Math 10-20-30	11,934.40	152	78.51	39.39	39.39
Math 11-21-31	5,344.86	57	93.76	17.64	17.64
Math 12-22	3,294.38	13	253.41	10.87	10.87
Remedial Math	2,824.38	71	39.78	9.32	9.32
Science	(27,940.96)	(432)	(64.68)	(92.21)	(92.28)
Biology 10-20-30	6,686.47	144	46.43	22.07	22.09
Chemistry 10-20-30	9,672.24	153	63.21	31.92	31.94
Physics 10-20-30	6,394.83	72	88.81	21.11	21.13
Science 11	5,187.42	63	82.34	17.12	17.14
Modern Languages	(9,584.19)	(148)	(64.75)	(31.63)	(31.63)
French 10-20-30	9,584.19	148	64.75	31.63	31.63
Fine Arts	(1,730.93)	(23)	(75.26)	(14.55)	(14.55)
Music 10	865.50	10	86.55	2.86	2.86
Music 11	865.41	13	66.57	2.86	2.86
Physical Education	(11,337.46)	(176)	(64.42)	(37.42)	(38.07)
Phys. Ed. 10-20	11,337.46	176	64.42	37.42	38.07

TABLE 35 (Continued)

Course	Direct Cost*	Pupil Enrol.*	Dir. Cost Per Enrol. Pupil*	Dir. Cost Per Pupil**	Dir./Ind. Cost Per Pupil**
Business Education	(17,419.92)	(348)	(50.05)	(57.49)	(79.91)
Bookkeeping 10	3,294.50	25	131.78	10.87	14.61
Typewriting 10-20-30	9,764.52	263	37.12	32.23	35.97
Law 20	904.59	19	47.61	2.99	6.73
Clerical Practice 20	904.53	11	82.23	2.99	6.73
Data Processing 22	1,647.11	19	86.69	5.44	9.18
Shorthand 31	904.53	11	82.23	2.99	6.73
Home Economics	(10,870.17)	(91)	(119.45)	(35.88)	(35.88)
Fabrics and Dress					
10-20	4,214.25	35	120.40	13.91	13.91
Foods and Nutrition					
10	2,621.92	16	163.87	8.65	8.65
Home Economics 10	2,629.20	28	93.90	8.68	8.68
Home Economics 21	1,404.72	12	117.06	4.64	4.64
Industrial Arts	(13,109.82)	(140)	(93.64)	(43.27)	(43.27)
Ind. Arts Gen.					
10-20	6,833.45	73	93.60	22.55	22.55
Ind. Arts Elect.					
10	1,726.40	26	66.40	5.70	5.70
Ind. Arts Power					
Mech. 10	4,550.18	41	110.98	15.02	15.02
Direct and Direct/ Indirect Average Per Pupil Cost*	173,872.87	303	--	573.84	596.97
Implementary Per Pupil Cost	--	303	--	--	487.93
Average Per Pupil Cost	--	303	--	--	1084.90

* Includes both semesters.

** A base of 303 students, the estimated average number of Division IV students in the Lac La Biche School Division, has been utilized in the calculation of the per pupil costs for the school year.

() Indicate a sub-total for a curriculum cluster.

Because of larger amounts of instructional time, Science at \$27,940.96 was the most expensive course cluster in direct costs, while Language Arts at \$26,093.92 was the second most expensive cluster. The small amount of time spent on Religious Instruction made that the least expensive cluster at \$742.40 in direct costs. Small enrollment and comparatively larger instructional times made the Home Economics cluster at \$119.45 per enrolled pupil the most expensive cluster. For similar reasons Industrial Arts at \$93.64 per enrolled pupil was the second most expensive cluster in terms of direct costs per enrolled pupil. Conversely, the low time expenditure with an "average" enrollment created Religious Instruction at \$35.35 per enrolled pupil as the least expensive cluster. Within clusters some extremes were also noted for individual or course combinations. For instance, Mathematics 12-22, with high time expenditure in relation to low enrollment, was \$253.41 per enrolled pupil, but Psychology 20, with a low expenditure of time, was \$33.55 per enrolled pupil.

Examination of indirect costs coupled with direct costs equalized for enrollment for the Division revealed that the most expensive course cluster was Science at \$92.28 per pupil. The least expensive cluster was Religious Instruction at \$2.45 per pupil. The extremes appeared due primarily to the extremes in instructional times devoted to the respective clusters.

When all costs were considered in terms of a single

student, the average cost to the Lac La Biche School Division for a Division IV student was \$1,084.90 per pupil. The more extensive program, and more courses with low enrollment, created Grade Ten at \$1,235.32 per pupil as the most expensive grade when all costs were considered. A reduction in courses offered, fewer courses of low enrollments, and slightly lower (than Grade Twelve) implementary costs, created Grade Eleven at \$977.71 per pupil as the least expensive grade in average per pupil costs.

Opportunity Classes

Lac La Biche School Division No. 51 had forty-six students enrolled in three Opportunity Classes during the 1969-1970 school year. The instructional costs associated with these students have been outlined in Table 36. Direct costs, and direct costs per pupil, were based on the prorated portions of a teacher's time expended in offering instruction to these students. Although all three classes had one teacher whose total or main teaching duty was related to these pupils, other teachers were also involved in fulfilling specific tasks (i.e. athletic or vocational instruction). Information pertinent to direct costs was included in Table 37. Indirect costs were based on applicable grade level and school as extracted from the accounts in the Divisional office (refer to Table 42 in Appendix C). Implementary costs were assigned in a like manner (refer to Table 44 in Appendix C). Average per pupil costs were based upon a total of the direct, indirect, and implementary per pupil costs. The Division

TABLE 37

TEACHER QUALIFICATIONS FOR OPPORTUNITY CLASSES
IN THE LAC LA BICHE SCHOOL DIVISION

School	Level	Number of Teachers	Average Salary	Average Experience*	Average Training
Dr. Swift	7	5	7,468.00	6.20	2.6
Plamondon	7	5	7,328.60	3.80	3.6
Dr. Swift	8	5	8,284.00	6.40	3.2
Lac La Biche	-	15	7,692.75	5.83	3.3

* Experience not based on salary schedule.

average costs were obtained by totalling the expenditures involved and dividing that total by the forty-six enrolled students.

Direct costs were highest in the Grade Eight Opportunity Class in Dr. Swift School (\$934.59 per pupil) due primarily to the higher average teacher salaries (Table 37). Higher indirect costs in the Dr. Swift School were attributed to on-going increases in equipment that could be specifically allocated to Opportunity Classes. Implementary costs were extremely similar for all three classes, averaging \$347.52 per pupil.

Average pupil costs varied by approximately \$200.00 per pupil in the three classes, reflecting mainly differences in direct pupil costs. Dr. Swift's Grade Seven Class cost \$900.86 per pupil, Plamondon's Grade Seven Class cost \$1,107.04 per pupil, and Dr. Swift's Grade Eight Class cost \$1,333.37 per pupil when all costs were considered.

For the forty-six opportunity pupils in the Division, each student averaged \$716.73 per pupil in direct costs, \$36.10 per pupil in indirect costs, and \$347.52 per pupil in implementary costs to yield an average cost of \$1,100.35 per pupil for all costs. The costs were considered higher than many regular class pupil costs due to lower enrollments and higher average teacher costs reflected in terms of direct costs.

CURRICULUM CLUSTER COSTS

All courses offered in the Lac La Biche School Division were assembled into related fields of knowledge by grades and divisions and termed Curriculum Clusters. The curriculum clusters have been included as supplementary information in this study and thus have been placed in Appendix D. Tables 46, 47, and 48 have denoted the courses in their respective curriculum clusters for Divisions I and II, Division III, and Division IV respectively.

Table 49 (Division I), Table 50 (Division II), Table 51 (Division III), and Table 52 (Division IV) in Appendix D have illustrated the instructional costs and average teacher salaries, experience, and training by grades, and divisional averages under the various curriculum cluster headings. While all courses, with the exception of opportunity classes, have been included, caution is urged in interpreting the data since the tables were created by averaging all costs of the courses offered in the numerous levels of the Division and incorporating them into clusters of varying size.

SUMMARY

Chapter IV has presented the data obtained from the examination of operating costs of the Lac La Biche School Division No. 51 for the school year 1969-1970. Composed of eight schools, 2,239 pupils, and 111 teachers, the Division's costs were analyzed in terms of known and estimated expenditures for schools, grades, and divisions.

Examination of the total expenditures for the Division revealed that the greatest expenditure was Direct Salaries of teaching personnel averaging 52.72% of the operating costs while 16.00%, the second greatest expenditure, was devoted to Pupil Transportation. Although some variation occurred from school to school, the figures were also generally representative of expenditures when the eight schools were similarly analyzed.

Costs were extracted from various sources and created the three main types of costs: direct costs, indirect costs, and implementary costs. Direct and indirect costs were assigned to specific courses and levels by schools, while implementary costs were offered as supplementary information for each level and school. As a consequence, data were assembled and analyzed in terms of costs per pupil: (1) per school, (2) per subject, (3) per divisional level, (4) per grade in the Division, (5) per division in the Division, and (6) per subject cluster (curriculum cluster) in the Division.

In general, costs increased when teachers' salaries were higher, instructional time increased, and/or enrollments decreased. Costs generally decreased when salaries were lower, instructional time was lessened, and/or enrollments increased. Provision of more equipment, more materials, and/or more or higher-priced services tended to increase pupil costs.

CHAPTER V

SUMMARY, FINDINGS AND CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

INTRODUCTION

Chapter V has been devoted to offering a summary of the study, gathering together the findings and conclusions afforded by this study, and proposing implications and recommendations afforded by the study as a basis for future usage and research.

SUMMARY

While concern has permeated public and government groups and individuals with respect to the costs of education, suggestions from many sources indicated that a rigorous examination of educational expenditures might afford a useful basis for future action. Established for that purpose, this study conducted a unit cost analysis into the financial operations of Lac La Biche School Division No. 51 for the 1969-1970 school year. Examination of expenditures was conducted to enable data to be analyzed by courses, schools, grades, and divisional levels. Terms and definitions were defined in operational terms and an accounting system to categorize expenditures was adopted and utilized in the Lac La Biche School Division. Data were collected from

invoices and vouchers in the Central Office of the Division, and courses and programs were assembled by surveys and through personal contact with teachers and administrators of the concerned schools. All expenditures were prorated to effect analysis. Since the study commenced prior to termination of the 1969-1970 school year, costs were projected by various methods for the May to August, 1970 period. Data were assembled into fifty-two tables to facilitate analysis and to reveal the findings of the study.

FINDINGS AND CONCLUSIONS

Overall costs of the Division were classified and analyzed to yield a comprehensive view of expenditures for the year under study. Elimination of debt services and capital outlay revealed an operating cost of \$1,617,872.32 estimated for the school year, or an average of \$722.59 per pupil. When costs were examined further, 52.72% of the total amount was devoted to teacher salaries (Direct Salaries-Instruction) making it the most costly expenditure classification. Transportation at 16.00% of the total was second most costly in the Division's costs. Similar ratios for those expenditure classifications were found, in general, when costs were allocated in a like manner to the eight schools in the Lac La Biche School Division. However, percentages of teacher costs decreased in schools when Transportation (and other service) costs increased. Total school costs increased with increases in the size of

enrollments. But, average pupil costs increased in schools of low enrollment and by grade levels. Of particular significance were extremes in average pupil costs reflecting the impact of enrollment size, salary levels, time, and supplementary services. J. A. Williams School (Grades 10, 11, and 12) at \$1,081.92 per pupil had the highest pupil cost while V. M. Welsh School (Grades 3, 4, 5, and 6) at \$562.49 had the lowest pupil cost.

All expenditures were assigned to schools in terms of direct, indirect, and implementary costs. Direct costs were assigned on the basis of actual instructional duties in relation to a particular course, level, and school. When time (and enrollments in the case of pupil costs) was held constant and since teachers were paid in accordance with years of training and experience, the courses, grades, and schools with higher trained and more experienced teachers incurred higher direct costs. Indirect costs were expenditures specifically allocable to a particular course, level, and school and were incorporated into the cost of that course. The highest indirect costs included Physical Education in Divisions I and II, Industrial Arts, Science, and Opportunity Class in Division III, and Business Education in Division IV. Such costs seemed to reflect priorities in materials and equipment afforded those courses at their respective levels. Implementary costs were those expenditures that could not be specifically allocated to a particular course. As services and additional personnel increased, such costs also appeared

to increase. For example, in general, costs progressively increased in Division averages (refer to Table 44 in Appendix C) from \$281.08 per pupil in Grade One to \$514.06 per pupil in Grade Twelve. Implementary costs also increased by schools within instructional levels when enrollments decreased and/or when distances from the approximate centre of the Division (the Town of Lac La Biche) increased.

Costs for individual courses were completed on a grade-school basis and on a grade-Division basis. Such costs were affected by three main factors: salary levels, enrollment size, and the amount of instructional time. As teacher salaries increased, course costs (Direct Costs) also increased since the prorated portion of a teacher's time determined the cost of a particular course. As enrollment size increased, the course cost per pupil decreased since larger enrollments divided into direct costs reduced the average pupil costs. An increase in instructional time generated a corresponding increase of a teacher's time and consequently an increase in direct costs and per pupil costs. While exceptions did occur, particularly in individual schools, generally the highest costs were obtained by Reading/Phonics and Mathematics in Divisions I and II, Language and Mathematics in Division III, and Science, Mathematics, and Language Arts in Division IV. Generally the least expensive courses for all levels were Supervised Study or Special Supervision courses while courses in the Fine Arts usually were second lowest in costs. Despite

effects from individual salary differences and enrollment sizes, higher costs seemed a reflection primarily of the larger amounts of instructional time contrasted to the lesser amounts of instructional time for the least expensive courses. Nevertheless, some expensive courses, exceptions to the general statements above, were incurred when small enrollments increased per pupil costs. Average pupil costs, a sum of all direct, indirect, and implementary costs divided by the enrollment at a particular level, were noticed to progressively increase in general from Grades One to Twelve. Perhaps due to the differences in teacher salaries or enrollments, notable extremes were the low average per pupil cost of \$555.21 per pupil in Grade Five, the high average per pupil cost of \$1,235.32 per pupil in Grade Ten, and the high costs of all Opportunity classrooms.

IMPLICATIONS AND RECOMMENDATIONS

On the basis of this study, the following implications and recommendations have arisen:

(1) The data presented in this study should prove useful to administrators and others concerned with establishing future priorities in programs and allocation of resources. However, it is suggested that the data be used with caution since average costs were affected by the size of staff, enrollments, present existencies, and priorities or needs established prior to the year of the study.

(2) The data presented in this study should only be

considered valid for the area and time in which the study was completed. It is recommended that a longitudinal study of a similar nature be conducted in this area to clarify the allocation of expenditures over a longer period of time.

(3) The need to compare findings in other school jurisdictions with this study area should prove invaluable to many concerned institutions. While the idiosyncratic nature of this study presumably has not facilitated this eventuality, it is recommended that one researcher, as opposed to a group, undertake a comparative study utilizing further refined and standardized procedures.

(4) A voluminous amount of data was selected and retained by this study; yet, more data were rejected since such information appeared beyond the scope of this study. Because of the quantity, quality, and nature of available information, it is recommended that future studies, or concerned agencies, establish computer-oriented data collection sheets permitting accurate and rapid transfer of data from sources. Coincidentally a more comprehensive computer program should be created to ingest such data in a "one-step operation" yielding increased efficiency and effectiveness to a researcher or school jurisdiction undertaking similar studies.

(5) Fluctuations in enrollments, salaries, and instructional times were found to be key contributors to course costs. It is suggested that further studies be established to determine the most efficient combination of

these factors in relation to courses offered.

(6) Tentative findings indicated that pupil costs were less expensive in more centralized schools. It is recommended that a study be conducted to examine and verify this implication.

(7) The data presented in this study have yielded educational input in terms of expenditures. It is suggested that a cost benefit analysis be conducted to ascertain the nature of output, performances, or benefits accruing from such input in the Lac La Biche School Division, or in other jurisdictions where such studies have been conducted.

CONCLUSION

This chapter has summarized the nature of the study undertaken and has reviewed and synthesized the findings of the analyzed data. Attention was focussed upon the general rather than the specific findings of the data. As a result of the findings and conclusions, the researcher has suggested that further studies or operations be conducted to: (1) apply the data obtained, (2) examine costs on a longitudinal basis, (3) relate to other jurisdictions, (4) facilitate collection and analysis of data, (5) determine economical means of offering courses, (6) examine the efficiency of centralization using pupil costs as a basis, and (7) ascertain the benefits derived from expenditures.

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APPENDIX A

RELATED CORRESPONDENCE

SCHEDULE

1. The proposed study is related to the work of the Minister's Committee on School Finance and derives from a specific recommendation in the Committee's report.
2. The broad field in which this is based is that of program analysis and budgeting.
3. The study will be undertaken in selected typical jurisdictions and will include activities such as these:
 - (a) Identifying and defining programs currently in existence in typical jurisdictions.
 - (b) Identifying the financial, human and material resources allocated to the achievement of these programs.
 - (c) Establishing the costs of programs in various types of school organization and determining the optimum conditions for economical administration.
 - (d) Developing forms and procedures for the processing of data to introduce program budgeting.
 - (e) Undertaking the training of selected personnel from local jurisdictions to administer program budgeting procedures.
 - (f) Establishing a pilot project in program analysis and budgeting.
 - (g) Recommending procedures for the institution of program analyses and budgeting throughout the total provincial school system.



January 19, 1970

Mr. R. A. Gorrie, Superintendent
Lac La Biche School Division No.51
Box 298
Lac La Biche, Alberta

Dear Sir:

As a graduate student working on my master's degree in Educational Administration, I have been assigned the task of completing a financial study as a requirement for my thesis. Such a study, I am certain, might prove of interest and assistance to the Lac La Biche School Division.

A recent project conducted by a student in the Department of Educational Administration of the University of Alberta selected Lac La Biche School Division as an integral part of a proposed study on financial operations of Alberta school jurisdictions. Dr. P. Atherton of this Department has been directed by the Department of Education to complete studies in the field of program budgeting--an enclosed copy of the letter from the Department of Education may clarify this project for you. To be successful, however, the project needs your cooperation, and that of your staff's, in completing a cost analysis of the educational costs of the Lac La Biche Division.

The study would necessitate; firstly, your permission to conduct a cost analysis in your Division, and secondly, access to expenditure data and personnel in your Division in order to collect the information needed. Any inconveniences should be minimal, since the bulk of the data would be collected by myself and by workload surveys. Analysis of the findings would yield expenditures on a per pupil basis for the various grades, divisions, subjects, and programs in your Division and in each school of your Division for the 1969-1970 school year.

Several copies of the thesis, which should be completed by the Fall of 1970, would be donated to the Lac La Biche School Division in anticipation that the analysis would prove of value for future planning and allocating of resources.

Should you desire more information and consultation, I should be pleased to have the opportunity to visit and discuss the study with you. May I express my gratitude for your consideration of this matter, and I await your reply on your assistance and permission to conduct this study.

Yours sincerely,

George A. W. Purkess



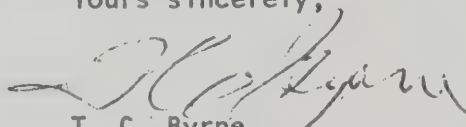
Edmonton 6, Alberta.
November 26, 1969.

TO WHOM IT MAY CONCERN:

This letter is directed particularly to Superintendents, Secretary-Treasurers, and Chairmen of those Divisions or Counties in which Dr. Peter Atherton is particularly interested.

Dr. Atherton is undertaking research in the field of program budgeting. He is using certain counties, divisions, and school districts as experimental centres for exploring the many issues of program budgeting. Your jurisdiction is one of these and I would appreciate very much any cooperation that you might be able to give him.

Yours sincerely,



T. C. Byrne,
Deputy Minister.

APPENDIX B

DATA COLLECTION FORMS

NAME _____

Total Time (Min.)

NOTES

- (2) Example of Total Time: 8 minutes for 10

NAME _____

POSITION _____

SCHOOL _____

ESTIMATION OF TIME SPENT BY GRADE DIVISIONS AND PROGRAMS

NOTE - It is recommended that the following percentages be estimated from a one-week period.

My Time is Divided
Among the Divisions as
Follows:

Div. I _____

Div. II _____

Div. III _____

Div. IV _____

Total - 100%

If in Div. IV
My Time is Divided
Among the Programs
as Follows:

Academic _____

General _____

Commercial _____

Vocational _____

Other _____

Specify _____

Total - 100%

CATEGORY: *

DATE:

[illegible]

APPENDIX C

DIRECT, INDIRECT, AND IMPLEMENTARY COSTS

TABLE 38

TOTAL AND PER PUPIL DIRECT INSTRUCTIONAL COSTS BY GRADES AND
DIVISIONS FOR LAC LA BICHE SCHOOL DIVISION

Level	Total Direct Cost	Program Enrolment	Direct Per Enrolment Pupil Cost	Actual Enrolment	Actual Direct Per Pupil Cost
Grade 1	89,874.24	3,762	23.89	272	330.42
2	85,978.23	3,135	27.42	247	348.09
3	88,235.52	3,383	26.08	256	344.67
Division I	264,087.99	10,280	25.69	775	340.76
Grade 4	73,960.64	3,034	24.37	214	345.61
5	56,061.35	2,980	18.81	205	273.47
6	76,293.00	2,865	26.62	210	363.30
Division II	206,314.99	8,879	23.24	629	328.00
Grade 7	57,742.82	2,192	26.34	173	333.77
8	55,882.26	1,991	28.06	157	355.93
9	61,328.20	1,927	31.82	156	393.12
Division III	174,953.26	6,110	28.63	486	359.99
Grade 10	85,268.95	1,437	59.33	119	716.55
11	46,783.01	739	63.30	97	482.32
12	41,820.91	522	80.11	87	476.81
Division IV	173,872.87	2,698	64.45	303	573.84
Opport. Classes	32,969.78	46	716.73	46	716.73
Lac La Biche School Division	852,198.89*	27,013	31.55	2,239	380.62

* Represents 99.9154% of direct instructional expenditures as indicated in Table 6. The total direct cost of this table is \$722.13 less than estimated by Table 6, an average error of 0.0846%.

TABLE 39

TOTAL AND PER PUPIL DIRECT INSTRUCTIONAL COSTS BY
SCHOOLS PER DIVISION IN THE LAC LA BICHE
SCHOOL DIVISION

Division I				
	Total Cost	Prog. Enrol.	Per Enrol. Pupil	Per Pupil Cost*
Central	127,971.07	5,034	25.42	330.67**
V.M. Welsh	63,268.18	2,760	22.92	340.15†
Dr. Swift	--	--	--	--
J.A. Williams	--	--	--	--
Plamondon	24,407.36	897	27.21	316.98
Caslan	28,417.41	837	33.95	417.90
Wander. Riv.	12,414.48	378	32.84	413.82
Rich Lake	8,363.94	297	28.16	309.78
Lac La Biche School Division	264,087.99	10,280	25.69	340.76
Division II				
Central	--	--	--	--
V.M. Welsh	142,409.20	7,018	20.29	304.29
Dr. Swift	--	--	--	--
J.A. Williams	--	--	--	--
Plamondon	22,400.93	802	27.93	355.57
Caslan	16,881.54	413	40.88	392.59
Wander. Riv.	12,955.98	478	27.10	392.61
Rich Lake	9,692.61	214	45.29	440.57
Lac La Biche School Division	206,314.99	8,879	23.24	328.00

TABLE 39 (Continued)

Division III				
	Total Cost	Prog. Enrol.	Per Enrol. Pupil	Per Pupil Cost*
Central	--	--	--	--
V.M. Welsh	--	--	--	--
Dr. Swift	119,083.90	4,937	24.12	316.71
J.A. Williams	--	--	--	--
Plamondon	26,789.20	697	38.44	382.70
Caslan	--	--	--	--
Wander. Riv.	16,811.17	365	46.06	622.64
Rich Lake	8,568.24	169	50.70	659.10††
Lac La Biche School Division	174,953.26	6,110	28.63	359.99
Division IV				
Central	--	--	--	--
V.M. Welsh	--	--	--	--
Dr. Swift	--	--	--	--
J.A. Williams	141,098.94	2,231	63.24	564.40
Plamondon	32,775.39	467	70.18	618.40
Caslan	--	--	--	--
Wander. Riv.	--	--	--	--
Rich Lake	--	--	--	--
Lac La Biche School Division	173,872.87	2,698	64.45	573.84

* Based on actual enrolments.

** Grades one and two only.

† Grade three only.

†† Grades seven and eight only.

TABLE 40

TOTAL INDIRECT COSTS ALLOCABLE TO COURSES
AND SCHOOLS OF DIVISION I OF THE
LAC LA BICHE SCHOOL DIVISION*

School	Course	Grade 1	Grade 2	Grade 3	Division I
Central	Physical Educ.	433.42	361.53	--	794.95
	Science	43.25	36.09	--	79.34
Plamondon	Physical Educ.	21.86	23.69	24.59	70.14
	Science	9.03	9.78	10.16	28.97
Caslan	Physical Educ.	5.22	6.46	5.22	16.90
	Science	8.76	10.85	8.76	28.37
Rich Lake	Physical Educ.	8.71	4.84	12.58	26.13
Lac La Biche	Physical Educ.	469.21	396.52	42.39	908.12
	Science	61.04	56.72	18.92	136.68

* No indirect costs for any grades recorded in V.M. Welsh and Wandering River Schools.

TABLE 41

TOTAL INDIRECT COSTS ALLOCABLE TO COURSES
AND SCHOOLS OF DIVISION II OF THE
LAC LA BICHE SCHOOL DIVISION

School	Course	Grade 4	Grade 5	Grade 6	Division II
Plamondon	Physical Educ.	19.13	18.22	20.04	57.39
	Science	7.90	7.52	8.27	23.69
Caslan	Physical Educ.	2.73	3.73	4.23	10.69
	Science	4.59	6.26	7.09	17.94
Rich Lake	Physical Educ.	7.74	5.81	7.74	21.29
Lac La Biche	Physical Educ.	29.60	27.76	32.01	89.37
	Science	12.49	13.78	15.36	41.63

TABLE 42

TOTAL INDIRECT COSTS ALLOCABLE TO COURSES
AND SCHOOLS OF DIVISION III OF THE
LAC LA BICHE SCHOOL DIVISION

School	Course	Grade 7	Grade 8	Grade 9	Division III
Dr. Swift	Physical Educ.	163.51	146.52	124.22	434.25
	Science	523.99	469.55	398.09	1391.63
	Ind. Arts	4446.52	--	3204.11	7650.63
	Home Economics	42.75	--	42.75	85.50
	Opportunity*	658.67	656.78	--	1315.45
Plamondon	Physical Educ.	20.95	19.13	23.69	63.77
	Science	13.54	7.90	9.78	31.22
	Opportunity	172.33	--	--	172.33
Rich Lake	Physical Educ.	6.77	5.81	--	12.58
Lac La Biche	Physical Educ.	191.23	171.46	147.91	510.60
	Science	537.53	477.45	407.87	1422.85
	Ind. Arts	4446.52	--	3204.11	7650.63
	Home Economics	46.80	--	46.80	85.50
	Opportunity*	831.00	656.78	--	1487.78

* Includes 653.63 per grade allocable from Industrial Arts expenditures, remainder from Home Economics expenditures.

TABLE 43

TOTAL INDIRECT COSTS ALLOCABLE TO COURSES
AND SCHOOLS OF DIVISION IV OF THE
LAC LA BICHE SCHOOL DIVISION

School	Curr. Cluster	Grade 10	Grade 11	Grade 12	Division IV
J.A. Williams	Physical Educ.	58.00	46.16	43.79	147.95
	Bus. Educ.	5385.43	948.98	260.97	6595.38
Plamondon	Physical Educ.	19.13	17.31	11.84	48.28
	Science	7.90	7.15	4.89	19.94
	Bus. Educ.	98.63	78.90	19.72	197.25
Lac La Biche	Physical Educ.	77.13	63.47	55.63	196.23
	Science	7.90	7.15	4.89	19.94
	Bus. Educ.	5484.06	1027.88	280.69	6792.63

ESTIMATED AVERAGE TOTAL AND PER PUPIL IMPLEMENTARY COSTS BY GRADES AND DIVISIONS
IN THE LAC LA BICHE SCHOOL DIVISION

School	PerPupil			PerPupil			Per Pupil			Pupils	Cost
	Total	Enrol.		Total	Enrol.		Total	Enrol.			
		Grade 1	Grade 2		Grade 1	Grade 2		Grade 3	Grade 4		
Central	52,880.62	211	250.62	45,663.20	176	259.45	--	--	--	387	254.64
V.M. Welsh	--	-	--	--	-	--	44,907.84	186	241.44	186	241.44
Plamondon	8,507.52	24	354.48	9,018.88	26	346.88	9,246.47	27	342.47	77	347.69
Caslan	6,676.32	21	317.92	7,872.54	26	302.79	6,676.32	21	317.92	68	312.13
Wandering River	3,047.45	7	435.35	5,226.34	14	373.31	3,669.93	9	407.77	30	398.12
Rich Lake	5,341.50	9	593.50	3,328.50	5	665.70	7,354.49	13	565.73	27	593.49
Total Lac La Biche	76,453.41	272	281.08	71,109.46	247	287.89	71,855.05	256	280.68	775	283.11
V.M. Welsh	41,099.11	169	243.19	37,290.16	152	245.33	36,398.67	147	247.61	468	245.27
Plamondon	7,829.01	21	372.81	7,573.20	20	378.66	8,100.62	22	368.21	63	373.06
Caslan	3,457.85	11	314.35	4,415.65	15	294.31	5,719.48	17	336.44	43	316.11
Wandering River	2,424.85	5	484.97	4,603.80	12	383.65	5,848.96	16	365.56	33	390.23
Rich Lake	4,838.24	8	604.78	3,831.78	6	638.63	4,838.24	8	604.78	22	614.01
Total Lac La Biche	59,649.06	214	278.73	57,714.59	205	281.53	60,905.97	210	290.03	629	283.41
Dr. Swift	52,165.64	154	341.66	48,373.14	138	350.53	42,674.58	117	364.74	409	351.25
Plamondon	12,677.76	36	352.16	7,927.71	21	377.51	9,228.44	26	354.94	83	359.44
Wandering River	3,047.45	7	435.35	3,047.45	7	435.35	5,783.44	13	444.88	27	439.93
Rich Lake	4,778.06	7	682.58	4,262.82	6	710.47	--	-	--	13	695.45
Total Lac La Biche	73,118.91	204*	358.43	63,611.12	172**	369.83	57,686.46	156	369.79	532	365.44
J.A. Williams	46,866.54	98	478.23	38,277.72	78	490.74	37,043.66	74	500.59	250	488.75
Plamondon	9,298.17	21	442.77	8,677.11	19	456.69	7,679.36	13	590.72	53	484.05
Total Lac La Biche	56,164.71	119	471.97	46,954.83	97	484.07	44,723.02	87	514.06	303	487.93

* Includes 18 Dr. Swift and 13 Plamondon opportunity students

** Includes 15 Dr. Swift opportunity students.

TABLE 45

ESTIMATED PER PUPIL IMPLEMENTARY COSTS BY SPECIFIED CLASSIFICATION BY GRADES PER SCHOOL
IN THE LAC LA BICHE SCHOOL DIVISION*

Expenditure Classification	Central			V. M. Welsh			Dr. Swift			J. A. Williams			Plamondon											
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
100																								
100 a.	16.59	16.59	16.75	16.75	16.75	16.75	16.62	16.62	16.62	18.13	18.13	18.13	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42	16.42
100 b.	9.91	9.91	10.01	10.01	10.01	10.01	9.93	9.93	9.93	10.83	10.83	10.83	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81
200 b.																								
200 b. (1)	24.06	28.85	22.76	25.05	27.86	28.81	34.76	40.61	48.25	57.39	66.98	73.77	19.84	18.32	16.60	26.91	28.25	24.41	12.33	21.14	17.08	31.71	35.05	116.12
200 b. (2)	5.76	6.90	4.35	4.80	5.34	5.52	7.53	8.02	7.79	11.35	13.84	14.59	8.11	7.48	7.21	9.26	9.73	8.84	8.11	9.26	7.48	9.26	10.24	14.96
200 b. (3)	--	--	--	--	--	--	7.53	8.02	7.79	11.35	13.84	14.59	8.11	7.48	7.21	9.26	9.73	8.84	8.11	9.26	7.48	9.26	10.24	14.96
200 b. (4)	3.08	3.78	4.59	5.05	5.62	5.81	10.45	8.74	10.31	22.38	21.09	22.23	15.09	14.85	14.30	18.39	19.31	17.55	16.09	18.39	14.85	18.39	20.32	23.77
200 b. (5)	5.78	5.78	4.70	4.70	4.70	4.70	2.55	2.55	2.55	5.69	5.69	5.69	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92	9.92
200 b. (6)	7.74	7.74	2.39	2.39	2.39	2.39	2.71	2.71	2.71	4.18	4.18	4.18	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26
200 b. (7)	4.90	4.90	4.94	4.94	4.94	4.94	4.91	4.91	4.91	5.35	5.35	5.35	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85	4.85
200 c.																								
200 c. (1)	7.76	7.76	7.84	7.84	7.84	7.84	7.78	7.78	7.78	8.48	8.48	8.48	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68	7.68
200 c. (2)	3.85	3.85	2.36	2.36	2.36	2.36	10.13	10.13	10.13	15.78	15.78	15.78	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12
200 c. (3)	8.93	8.93	8.88	8.88	8.88	8.88	25.65	25.65	25.65	27.18	27.18	27.18	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85	11.85
200 c. (4)	7.70	7.70	2.00	2.00	2.00	2.00	7.78	7.78	7.78	7.22	7.22	7.22	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
200 c. (5)	5.50	5.50	5.99	5.99	5.99	5.99	5.41	5.41	5.41	6.90	6.90	6.90	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09	5.09
500																								
500 a.	62.77	62.77	83.17	83.17	83.17	83.17	93.13	93.13	93.13	82.89	82.89	82.89	120.88	120.88	120.88	120.88	120.88	120.88	120.88	120.88	120.88	120.88	120.88	120.88
500 b.	13.24	13.24	9.50	9.50	9.50	9.50	23.82	23.82	23.82	15.60	15.60	15.60	--	--	--	--	--	--	--	--	--	--	--	--
500 c.	--	--	--	--	--	--	--	--	--	46.90	46.90	46.90	--	--	--	--	--	--	--	--	--	41.51	41.51	41.51
600																								
600 a.	18.69	19.87	15.74	15.02	14.13	14.61	15.09	16.84	17.03	28.85	27.19	28.66	21.77	20.09	19.35	24.88	26.12	23.75	21.77	24.88	20.09	24.88	27.49	40.12
600 b.	14.07	14.96	12.86	12.26	11.54	11.93	15.68	17.50	17.70	33.89	31.94	33.66	26.86	24.80	23.88	30.70	32.23	29.30	26.86	30.70	24.80	30.70	33.93	49.59
600 c.	3.22	3.43	2.87	2.74	2.58	2.67	2.89	2.89	2.92	4.07	3.84	4.05	3.33	3.07	2.96	3.80	3.99	3.63	3.33	3.80	3.07	3.80	4.20	6.14
600 d.	1.60	1.60	1.62	1.62	1.62	1.62	1.61	1.61	1.61	1.75	1.75	1.75	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59
600 e.	1.59	1.59	1.72	1.72	1.72	1.72	1.69	1.69	1.69	2.85	2.85	2.85	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
700																								
700 a.	19.09	19.09	7.72	7.72	7.72	7.72	20.39	20.39	20.39	28.55	28.55	28.55	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69	39.69
800																								
800 a.	11.79	11.79	9.62	9.62	9.62	9.62	13.42	13.42	13.42	20.32	20.32	20.32	11.77	11.77	11.77	11.77	11.77	11.77	11.77	11.77	11.77	11.77	11.77	11.77
Per Pupil																								
Total	250.62	259.45	241.44	243.19	245.33	247.61	341.66	350.53	364.14	418.23	490.71	500.11	311.13	346.93	342.47	372.81	378.66	368.21	352.16	377.51	354.94	442.77	456.69	590.72

TABLE 45 (CONTINUED)

Expenditure Classification	Casian			Wandering River						Rich Lake							
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8
100	17.01	17.01	17.01	17.01	17.01	17.01	16.78	16.78	16.78	16.78	16.78	16.78	18.27	18.27	18.27	18.27	18.27
100 a.	10.16	10.16	10.16	10.16	10.16	10.16	10.03	10.03	10.03	10.03	10.03	10.03	10.92	10.92	10.92	10.92	10.92
100 b.	10.19	8.23	10.19	9.73	7.13	12.59	17.69	8.84	13.76	24.76	10.32	7.74	17.69	17.69	19.05	8.07	14.52
200 b.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200 b.(1)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200 b.(2)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200 b.(3)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200 b.(4)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
200 b.(5)	2.66	2.66	2.66	2.66	2.66	2.66	13.12	13.12	13.12	13.12	13.12	13.12	13.12	13.12	3.92	3.92	3.92
200 b.(6)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	5.42	5.42	5.42
200 b.(7)	5.02	5.02	5.02	5.02	5.02	5.02	4.96	4.96	4.96	4.96	4.96	4.96	4.96	4.96	5.40	5.40	5.40
200 c.	7.96	7.96	7.96	7.96	7.96	7.96	7.85	7.85	7.85	7.85	7.85	7.85	7.85	7.85	8.55	8.55	8.55
200 c.(1)	12.88	12.88	12.88	12.88	12.88	12.88	7.50	7.50	7.50	7.50	7.50	7.50	12.98	12.98	12.98	12.98	12.98
200 c.(2)	16.51	16.51	16.51	16.51	16.51	16.51	17.34	17.34	17.34	17.34	17.34	17.34	17.34	17.34	11.96	11.96	11.96
200 c.(3)	2.68	2.68	2.68	2.68	2.68	2.68	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.19	2.19	2.19
200 c.(4)	6.37	6.37	6.37	6.37	6.37	6.37	6.67	6.67	6.67	6.67	6.67	6.67	6.67	6.67	5.95	5.95	5.95
200 c.(5)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500	107.50	107.50	107.50	107.50	107.50	107.50	150.32	150.32	150.32	150.32	150.32	150.32	150.32	150.32	306.22	306.22	306.22
500 a.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.08	4.08	4.08
500 b.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
500 c.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
600	31.62	25.54	31.62	30.18	22.13	39.06	49.60	24.80	38.57	69.43	28.93	21.70	49.60	49.60	53.41	38.51	69.32
600 a.	33.48	27.04	33.48	31.96	23.43	41.36	51.70	25.85	40.21	72.38	30.16	22.62	51.70	51.70	55.67	41.05	73.89
600 b.	3.39	2.74	3.39	3.24	2.38	4.19	5.09	2.55	3.96	7.13	2.97	2.23	5.09	5.09	5.48	2.61	4.71
600 c.	1.64	1.64	1.64	1.64	1.64	1.64	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.77	1.77
600 d.	2.53	2.53	2.53	2.53	2.53	2.53	.64	.64	.64	.64	.64	.64	.64	.64	.64	4.90	4.90
600 e.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
700	33.29	33.29	33.29	33.29	33.29	33.29	51.86	51.86	51.86	51.86	51.86	51.86	51.86	51.86	82.64	82.64	82.64
800	13.03	13.03	13.03	13.03	13.03	13.03	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	18.09	18.09	18.09
Per Pupil	317.92	302.79	317.92	314.35	294.31	336.44	435.35	373.31	407.77	484.97	383.65	365.56	435.35	435.35	444.88	593.50	682.58
Total																	

* Pupil costs are based upon the attendance in each grade per school and include opportunity students where applicable. All direct instructional costs (200 a.) and indirect costs have been excluded from the above figures.

APPENDIX D

CURRICULUM CLUSTERS, COSTS AND TEACHER QUALIFICATIONS

BY GRADES AND DIVISIONS IN LAC LA BICHE

SCHOOL DIVISION NO. 51: 1969-1970

TABLE 46

COURSES INCLUDED IN CURRICULUM CLUSTERS FOR DIVISIONS I AND II

Curriculum Cluster	Courses
Other Instruction	Opening Exercises Supervised Study Home Room Period Special Supervision Remedial Instruction
Religious Instruction	Religious Instruction
Language Arts	Language Printing or Writing Reading and Phonics Library or Storytime Spelling Creative English* French*
Social Studies	Social Studies or Enterprise
Mathematics	Mathematics or Arithmetic
Science	Science
Human Relations	Health Guidance
Fine Arts	Music Art
Physical Education	Physical Education
Home Economics	Home Economics
Industrial Arts	Industrial Arts

*French-speaking pupils take French while English-speaking pupils take Creative English.

TABLE 47

COURSES INCLUDED IN CURRICULUM CLUSTERS FOR DIVISION III

Curriculum Cluster	Courses
Other Instruction	Opening Exercises Supervised Study Special Supervision
Religious Instruction	Religious Instruction
Language Arts	Language Reading Library Spelling Literature
Mathematics	Mathematics Vocational Mathematics
Social Studies	Social Studies Sociology Geography
Science	Science Biology Agriculture
Human Relations	Health Guidance
Fine Arts	Music Art Drama
Modern Languages	French
Business Education	Typewriting
Physical Education	Physical Education
Home Economics	Home Economics
Industrial Arts	Industrial Arts

TABLE 48

COURSES INCLUDED IN CURRICULUM CLUSTERS FOR DIVISION IV

Curriculum Cluster	Courses
Other Instruction	Supervised Study
Religious Instruction	Religious Instruction
Language Arts	English 10, 20, 30, 23, 33 Language 22 Literature 11, 21 Reading 10
Social Studies	Social Studies 10, 20, 30, 36 Psychology 20 Sociology 20 Economics 30
Mathematics	Mathematics 10, 20, 30 Mathematics 11, 21, 31 Mathematics 12, 22 Remedial Mathematics
Science	Biology 10, 20, 30 Chemistry 10, 20, 30 Physics 10, 20, 30 Science 11
Modern Languages	French 10, 20, 30
Fine Arts	Music 10, 11
Physical Education	Physical Education 10, 20
Business Education	Bookkeeping 10 Typewriting 10, 20, 30 Law 20 Clerical Practice 20 Data Processing 22 Shorthand 31
Home Economics	Fabrics and Dress 10, 20 Foods and Nutrition 10 Home Economics 10, 21
Industrial Arts	Industrial Arts General 10, 20 Industrial Arts Electronics 10 Ind. Arts Power Mechanics 10

TABLE 49

CURRICULUM CLUSTER COSTS AND TEACHER QUALIFICATIONS
FOR DIVISION I OF LAC LA BICHE SCHOOL DIVISION

Curriculum* Cluster	Level	Instructional Costs					Teacher Qualifications			
		Cluster Enrol.	Direct Cost	Dir. Cost		Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
				Per Enrol. Pupil	Per Pupil**					
Other Instruction	G1	296	2,658.78	8.98	9.77	9.77	7,521.58	11.00	1.9	
	G2	247	2,704.93	10.95	10.95	10.95	8,088.25	11.58	2.2	
	G3	358	1,399.21	3.91	5.47	5.47	9,103.57	9.43	3.0	
	Div. I	901	6,762.92	7.51	8.73	8.73	8,127.95	11.11	2.3	
Religious Instruction	G1	242	5,243.80	21.67	19.28	19.28	6,600.00	5.00	1.0	
	G2	216	4,747.40	21.97	19.22	19.22	6,950.00	9.00	1.0	
	G3	222	2,360.67	10.63	9.22	9.22	6,950.00	14.00	1.0	
	Div. I	680	12,351.87	18.16	15.94	15.94	6,833.33	9.33	1.0	
Language Arts	G1	1072	47,601.69	44.40	175.00	175.00	7,787.14	11.21	2.4	
	G2	969	42,741.17	44.11	173.04	173.04	8,201.54	10.77	2.5	
	G3	1101	46,516.02	42.25	181.70	181.70	8,671.43	12.43	2.6	
	Div. I	3142	136,858.56	43.56	176.59	176.59	8,199.09	12.53	2.3	
Social Studies	G1	272	3,788.25	13.93	13.93	13.93	7,676.84	13.08	2.0	
	G2	247	4,246.35	17.20	17.20	17.20	8,116.58	12.75	2.2	
	G3	256	7,504.54	29.31	29.31	29.31	8,860.45	12.73	2.7	
	Div. I	775	15,539.14	20.05	20.05	20.05	8,220.45	12.65	2.3	
Mathematics	G1	272	13,450.28	49.45	49.45	49.45	7,676.84	13.08	2.0	
	G2	247	13,779.84	55.79	55.79	55.79	8,116.58	12.75	2.2	
	G3	256	13,762.17	53.76	53.76	53.76	8,860.45	12.73	2.7	
	Div. I	775	40,992.29	52.89	52.89	52.89	8,220.45	12.65	2.3	

TABLE 49 (CONTINUED)

Curriculum* Cluster	Level	Instructional Costs					Teacher Qualifications			
		Cluster Enrol.	Dir. Cost		Per Pupil**	Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
			Enrol.	Per Enrol. Pupil						
Science	G1	272	4,065.06	14.95	14.95	15.17	7,650.69	12.00	2.0	
	G2	247	5,676.11	22.98	22.98	23.21	8,088.25	11.58	2.2	
	G3	256	6,296.37	24.60	24.60	24.67	8,724.58	10.50	2.9	
	Div. I	961	16,037.54	16.69	20.69	20.87	8,201.94	11.73	2.4	
Human Relations	G1	272	3,048.98	11.21	11.21	11.21	7,721.38	12.62	2.0	
	G2	247	3,255.31	13.18	13.18	13.18	8,164.83	12.25	2.2	
	G3	229	2,577.28	11.25	10.07	10.07	8,734.90	12.70	2.5	
	Div. I	748	8,881.57	11.87	11.46	11.46	8,157.27	12.63	2.2	
Fine Arts	G1	520	6,585.99	12.67	24.21	24.21	7,703.14	11.93	2.1	
	G2	468	5,966.84	12.75	23.31	23.31	8,111.07	11.54	2.3	
	G3	458	5,641.00	12.32	22.04	22.04	8,619.54	11.82	2.6	
	Div. I	1446	18,193.82	12.58	23.48	23.48	8,134.96	12.32	2.3	
Physical Education	G1	272	3,424.28	12.59	12.59	14.32	7,034.20	11.20	2.4	
	G2	247	2,859.96	11.58	11.58	13.19	8,025.20	9.20	3.0	
	G3	256	3,133.17	12.24	12.24	12.41	8,769.00	8.60	3.2	
	Div. I	775	9,417.40	12.15	12.15	13.32	8,141.60	10.80	2.7	

* A complete listing of the courses included in the Division I curriculum clusters may be found in Table 46.

** Per pupil costs have been calculated on bases of actual numbers of students, that is, 272 for grade one, 247 for grade two, 256 for grade three, and 775 for Division I.

TABLE 50

CURRICULUM CLUSTER COSTS AND TEACHER QUALIFICATIONS FOR
DIVISION II OF IAC LA BICHE SCHOOL DIVISION

Curriculum* Cluster	Level	Instructional Costs					Teacher Qualifications			
		Cluster Enrol.	Dir. Cost		Per Pupil**	Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
			Direct Cost	Per Enrol. Pupil						
Other Instruction	G4	325	1,238.26	3.81	5.79	5.79	8,581.43	11.86	2.1	
	G5	272	1,018.99	3.75	4.97	4.97	7,122.66	12.17	2.2	
	G6	248	2,922.53	11.78	13.92	13.92	7,840.00	9.00	3.2	
	Div. II	845	5,179.78	6.13	8.23	8.23	7,913.75	12.06	2.3	
Religious Instruction	G4	195	2,130.06	10.92	9.95	9.95	6,950.00	14.00	1.0	
	G5	184	2,320.24	12.61	11.32	11.32	7,635.00	14.00	1.5	
	G6	185	2,362.68	12.77	11.25	11.25	7,635.00	14.00	1.5	
	Div. II	564	6,812.98	12.08	10.83	10.83	7,407.66	14.00	1.4	
Language Arts	G4	913	35,925.99	39.35	167.88	167.88	8,613.57	11.79	2.4	
	G5	916	25,250.06	27.57	123.17	123.17	7,625.54	12.15	1.9	
	G6	913	32,214.32	35.28	153.40	153.40	8,162.86	10.93	2.4	
	Div. II	2742	93,390.13	34.06	148.47	148.47	8,076.86	12.29	2.3	
Social Studies	G4	214	8,296.89	38.77	38.77	38.77	8,596.00	12.50	2.2	
	G5	185	6,203.16	33.53	30.26	30.26	7,533.38	13.75	1.9	
	G6	184	7,711.96	41.91	36.72	36.72	8,317.25	13.25	2.4	
	Div. II	583	22,212.00	38.10	35.31	35.31	8,003.90	13.25	2.0	
Mathematics	G4	214	11,456.68	53.54	53.54	53.54	8,155.30	13.70	2.5	
	G5	205	8,705.53	42.47	42.47	42.47	7,436.00	13.89	2.0	
	G6	228	12,832.90	56.28	61.11	61.11	7,956.33	14.33	2.8	
	Div. II	647	32,995.11	51.00	52.46	52.46	7,835.35	14.00	2.3	

TABLE 50 (CONTINUED)

Curriculum Cluster*	Level	Instructional Costs					Teacher Qualifications			
		Cluster Enrol.	Dir. Cost		Per Pupil**	Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
			Enrol.	Per Enrol. Pupil						
Science	G4	383	5,855.84	15.29	27.36	27.42	8,471.82	10.09	2.5	
	G5	357	5,370.65	15.04	26.20	26.27	7,444.70	10.90	2.1	
	G6	353	6,382.79	18.08	30.39	30.46	8,278.10	10.60	2.6	
	Div. II	1093	17,609.28	16.11	28.00	28.07	7,920.82	10.50	2.4	
Human Relations	G4	206	2,141.96	10.40	10.01	10.01	8,486.55	12.56	2.0	
	G5	179	1,417.48	7.92	6.91	6.91	7,240.86	14.00	1.6	
	G6	188	1,668.17	8.87	7.94	7.94	8,141.43	18.86	2.0	
	Div. II	573	5,227.60	9.12	8.32	8.32	7,927.21	13.42	1.9	
Fine Arts	G4	396	4,761.88	12.03	22.25	22.25	7,905.91	10.25	2.4	
	G5	477	3,343.64	7.01	16.31	16.31	6,917.80	10.80	2.2	
	G6	496	3,865.28	7.79	18.41	18.41	7,722.91	10.36	2.5	
	Div. II	1369	11,970.79	8.74	19.03	19.03	7,734.54	10.42	2.4	
Physical Education	G4	214	2,594.77	12.13	12.13	12.27	8,177.00	4.80	3.0	
	G5	205	2,429.97	11.85	11.85	11.99	8,177.00	4.80	3.0	
	G6	210	2,785.47	13.26	13.26	13.41	8,627.00	7.00	3.4	
	Div. II	629	7,810.21	12.42	12.42	12.56	8,414.16	5.60	3.1	
Home Economics	G4	--	--	--	--	--	--	--	--	
	G5	--	--	--	--	--	--	--	--	
	G6	8	1,317.00	164.63	6.27	6.27	1,317.00	8.00	3.0	
	Div. II	8	1,317.00	164.63	2.09	2.09	1,317.00	8.00	3.0	

TABLE 50 (CONTINUED)

Curriculum Cluster*	Level	Instructional Costs					Teacher Qualifications			
		Cluster Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.		
			Enrol.	Per Pupil						
Industrial Arts	G4	--	--	--	--	--	--	--	--	--
	G5	--	--	--	--	--	--	--	--	--
	G6	14	140.86	9.39	9.39	1,972.00	9.00	4.0		
	Div. II	14	140.86	3.14	3.14	1,972.00	9.00	4.0		

* A complete listing of the courses included in Division II curriculum clusters may be found in Table 46.

** Per pupil costs have been calculated on bases of actual numbers of students, that is, 214 for grade four, 205 for grade five, 210 for grade six, and 629 for Division II.

TABLE 51

CURRICULUM CLUSTER COSTS AND TEACHER QUALIFICATIONS FOR
DIVISION III OF LAC LA BICHE SCHOOL DIVISION

Curriculum* Cluster	Level	Instructional Costs					Teacher Qualifications				
		Direct Cost	Cluster Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.		
				Per Enrol. Pupil	Per Pupil**						
Other Instruction	G7	964.56	150	6.43	5.58	5.58	8,289.00	9.25	3.0		
	G8	1,348.44	157	8.59	8.59	8.59	8,269.20	8.60	3.0		
	G9	833.17	130	6.41	5.34	5.34	8,130.00	3.00	4.0		
	Div. III	3,146.17	437	7.20	6.47	6.47	8,442.66	8.50	3.0		
Religious Instruction	G7	485.46	23	21.11	2.81	2.81	7,830.00	3.00	4.0		
	G8	485.46	21	23.12	3.09	3.09	7,830.00	3.00	4.0		
	G9	742.40	26	28.55	4.76	4.76	11,600.00	38.00	4.0		
	Div. III	1,713.32	70	24.48	3.53	3.53	9,715.00	20.50	4.0		
Language Arts	G7	14,416.80	480	30.04	83.33	83.33	7,730.00	8.13	2.5		
	G8	14,482.73	450	32.18	92.25	92.25	8,211.13	7.50	2.8		
	G9	14,121.36	416	33.95	90.52	90.52	7,225.57	5.29	3.3		
	Div. III	43,020.90	1346	31.96	88.52	88.52	7,602.75	6.58	2.8		
Mathematics	G7	7,990.43	177	45.14	46.18	46.18	8,070.83	8.67	2.7		
	G8	8,069.39	158	51.07	51.40	51.40	8,168.00	8.80	3.0		
	G9	8,154.92	162	50.33	52.28	52.28	7,792.00	10.20	3.2		
	Div. III	24,214.71	497	48.72	49.82	49.82	7,829.38	8.38	3.0		
Social Studies	G7	10,326.23	316	32.68	59.69	59.69	8,320.00	11.00	2.8		
	G8	7,002.45	163	42.96	44.60	44.60	9,023.75	10.25	3.0		
	G9	5,926.39	156	37.99	37.99	37.99	7,705.00	8.33	3.0		
	Div. III	23,255.07	635	36.62	47.85	36.62	8,256.66	7.44	3.2		

TABLE 51 (CONTINUED)

Curriculum* Cluster	Level	INSTRUCTIONAL COSTS					TEACHER QUALIFICATIONS			
		Cluster	Dir. Cost		Per Pupil**	Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
			Enrol.	Per Enrol.						
Science	G7		183	29.59	31.30	34.41	7,831.25	4.50	3.0	
	G8		286	27.77	50.58	53.62	7,825.00	4.80	2.8	
	G9		163	37.42	39.10	41.71	8,893.33	17.67	3.0	
	Div. III		632	30.79	40.03	42.96	8,239.29	10.57	2.7	
Human Relations	G7		309	15.94	28.47	28.47	7,590.29	8.57	2.9	
	G8		282	16.57	29.77	29.77	7,408.66	6.00	2.8	
	G9		287	17.22	31.68	31.68	6,226.66	11.67	2.8	
	Div. III		878	16.56	29.92	29.92	6,921.50	8.60	2.9	
Fine Arts	G7		223	23.63	30.45	30.45	8,271.50	6.17	2.8	
	G8		297	27.64	52.29	52.29	8,271.50	6.17	2.8	
	G9		178	30.73	35.07	35.07	9,244.00	14.50	3.3	
	Div. III		698	27.15	38.99	38.99	8,586.88	9.75	3.1	
Modern Language	G7		19	18.08	1.99	1.99	8,075.00	9.00	3.0	
	G8		19	20.55	2.49	2.49	8,075.00	9.00	3.0	
	G9		134	24.01	20.62	20.62	7,835.75	10.75	3.8	
	Div. III		172	22.97	8.13	8.13	7,932.60	11.60	3.4	
Business Education	G7		3	65.42	1.13	1.13	4,710.00	17.00	3.0	
	G8		3	65.42	1.25	1.25	4,710.00	17.00	3.0	
	G9		3	65.42	1.26	1.26	4,710.00	17.00	3.0	
	Div. III		9	65.42	1.21	1.21	4,710.00	17.00	3.0	

TABLE 51 (CONTINUED)

Curriculum Cluster*	Level	Instructional Costs					Teacher Qualifications			
		Direct Cost	Cluster Enrol.	Dir. Cost		Dir. & Ind. Cost Per Pupil**	Avg. Salary	Avg. Exp.	Avg. Trng.	
				Per Enrol. Pupil	Per Pupil**					
Physical Education	G7	2,822.86	173	16.32	16.32	17.43	8,157.00	3.80	3.4	
	G8	3,084.15	157	19.64	19.64	20.73	8,157.00	3.80	3.4	
	G9	2,937.61	156	18.83	18.83	19.78	8,041.25	2.75	3.8	
	Div. III	8,844.63	486	18.20	18.20	19.25	8,157.00	3.80	3.4	
Home Economics	G7	2,113.76	68	31.08	12.22	12.49	6,005.00	1.00	2.0	
	G8	--	--	--	--	--	--	--	--	
	G9	2,113.76	68	31.08	13.55	13.85	6,005.00	1.00	2.0	
	Div. III	4,227.52	136	31.08	8.70	8.88	6,005.00	1.00	2.0	
Industrial Arts	G7	2,470.95	68	36.34	14.28	39.98	7,225.00	5.00	2.0	
	G8	--	--	--	--	--	--	--	--	
	G9	2,470.95	49	50.43	15.84	36.38	7,225.00	5.00	2.0	
	Div. III	4,941.90	117	42.24	10.17	25.91	7,225.00	5.00	2.0	

* A complete listing of the courses included in Division III curriculum clusters may be found in Table 47.

** Per pupil costs have been calculated on bases of actual numbers of students, that is 173 for grade seven, 157 for grade eight, 156 for grade nine, and 486 for Division III. Opportunity students and costs have been excluded.

TABLE 52

CURRICULUM CLUSTER COSTS AND TEACHER QUALIFICATIONS FOR
DIVISION IV OF LAC LA BICHE SCHOOL DIVISION

Curriculum Cluster*	Level	Instructional Costs					Teacher Qualifications			
		Direct Cost**	Cluster Enrol.**	Dir. Cost		Dir. & Ind. Cost Per Pupil	Avg. Salary	Avg. Exp.	Avg. Trng.	
				Per Enrol. Pupil**	Cost Per Pupil					
Other Instruction	G10	2,687.60	40	67.19	22.58	22.58	8,349.08	10.58	3.9	
	G11	3,290.98	56	58.77	33.93	33.93	8,349.08	10.58	3.9	
	G12	3,290.98	56	58.77	33.93	33.93	8,349.08	10.58	3.9	
	Div. IV	9,269.56	152	60.98	30.59	30.59	8,349.08	10.58	3.9	
Religious Instruction	G10	742.40	21	35.35	6.24	6.24	11,600.00	38.00	4.0	
	G11	--	--	--	--	--	--	--	--	
	G12	--	--	--	--	--	--	--	--	
	Div. IV	742.40	21	35.35	2.45	2.45	11,600.00	38.00	4.0	
Language Arts	G10	9,693.33	229	42.33	81.46	81.46	5,176.14	3.57	3.3	
	G11	9,787.99	164	59.68	100.91	100.91	7,123.40	9.40	5.0	
	G12	6,612.60	95	69.61	76.01	76.01	6,787.50	5.00	4.5	
	Div. IV	26,093.92	488	53.47	86.12	86.12	6,004.54	5.64	4.0	
Social Studies	G10	9,028.95	126	71.66	75.87	75.87	9,342.00	8.50	4.5	
	G11	5,590.32	130	43.00	57.63	57.63	9,208.75	13.75	3.8	
	G12	7,757.72	130	59.67	89.17	89.17	4,883.33	19.33	4.3	
	Div. IV	22,377.51	386	57.97	73.85	73.85	7,355.00	16.14	4.0	
Mathematics	G10	9,153.28	154	59.44	76.92	76.92	7,331.20	15.20	3.4	
	G11	7,971.99	74	107.73	82.19	82.19	9,183.25	19.00	4.8	
	G12	6,273.22	65	96.51	72.11	72.11	9,489.00	17.00	5.0	
	Div. IV	23,398.49	293	79.86	77.22	77.22	7,723.63	17.50	4.0	

TABLE 52 (CONTINUED)

Curriculum Cluster*	Level	Instructional Costs					Teacher Qualifications			
		Cluster	Dir. Cost		Dir. Cost Per Pupil	Dir. & Ind. Cost Per Pupil	Avg. Salary	Avg. Exp.	Avg. Trng.	
			Enrol.**	Per Enrol. Pupil**						
			Direct Cost**							
Science	G10	206	11,770.72	57.14	98.91	98.98	8,135.16	14.00	4.3	
	G11	112	4,915.70	43.89	50.68	50.75	9,682.00	8.33	4.0	
	G12	114	11,254.52	98.72	129.36	129.42	8,140.40	10.20	4.4	
	Div. IV	432	27,940.94	64.68	92.21	92.28	8,089.14	15.57	4.6	
Modern Language	G10	62	2,902.32	46.81	24.39	24.39	9,860.00	20.00	4.0	
	G11	50	3,037.15	60.74	31.31	31.31	5,599.00	2.50	3.5	
	G12	36	3,644.64	101.24	41.89	41.89	7,300.00	16.00	3.7	
	Div. IV	148	9,584.19	64.76	31.63	31.63	7,599.33	14.33	3.7	
Fine Arts	G10	23	1,730.93	75.26	14.55	14.55	2,599.00	1.00	3.0	
	G11	--	--	--	--	--	--	--	--	
	G12	--	--	--	--	--	--	--	--	
	Div. IV	23	1,730.93	75.26	5.71	5.71	2,599.00	1.00	3.0	
Physical Education	G10	145	8,633.51	59.54	72.55	73.20	6,461.75	6.00	4.8	
	G11	31	2,703.96	87.22	27.88	28.53	6,461.75	6.00	4.8	
	G12	--	--	--	--	0.64	--	--	--	
	Div. IV	176	11,337.46	64.42	37.42	38.07	6,461.75	6.00	4.8	
Business Education	G10	247	9,483.72	38.40	79.70	125.78	7,004.50	16.50	3.0	
	G11	75	4,949.62	65.99	51.02	61.62	8,985.00	6.00	3.5	
	G12	26	2,986.58	114.87	34.33	37.56	5,540.00	8.50	3.0	
	Div. IV	348	17,419.92	50.05	57.49	79.91	7,004.50	16.50	3.0	

TABLE 52 (CONTINUED)

Curriculum Cluster*	Level	Instructional Costs				Teacher Qualifications			
		Direct Cost**	Cluster Enrol.**	Dir. Cost		Dir. & Ind. Cost Per Pupil	Avg. Salary	Avg. Exp.	Avg. Trng.
				Per Enrol.	Per Pupil				
Home Economics	G10	8,060.67	74	108.93	67.74	67.74	6,431.00	4.50	3.0
	G11	2,809.50	17	165.26	28.96	28.96	5,619.00	1.00	3.0
	G12	--	--	--	--	--	--	--	--
	Div. IV	10,870.17	91	119.45	35.88	35.88	6,431.00	4.50	3.0
Industrial Arts	G10	11,383.48	110	103.49	95.66	95.66	7,189.00	5.00	3.5
	G11	1,726.34	30	57.54	17.80	17.80	6,490.00	1.00	3.0
	G12	--	--	--	--	--	--	--	--
	Div. IV	13,109.82	140	93.64	43.27	43.27	7,189.00	5.00	3.5

* A complete listing of the courses included in the Division IV curriculum clusters may be found in Table 48.

** Includes both semesters.

per pupil costs have been calculated on bases of estimated numbers of students for the school year, that is, 119 for grade ten, 97 for grade eleven, 87 for grade twelve, and 303 for Division IV.

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